

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-Q/A

Amendment No. 2

(Mark One)

**QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934**

For the quarterly period ended October 2, 2010

or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 001-33170



NETLIST, INC.

(Exact name of registrant as specified in its charter)

Delaware

State or other jurisdiction of incorporation or organization

95-4812784

(I.R.S. Employer Identification No.)

51 Discovery, Suite 150

Irvine, CA 92618

(Address of principal executive offices) (Zip Code)

(949) 435-0025

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The number of shares outstanding of each of the registrant's classes of common stock as of the latest practicable date:

Common Stock, par value \$0.001 per share
25,305,603 shares outstanding at November 1, 2010

EXPLANATORY NOTE

The registrant has prepared this Amendment No. 2 to its Quarterly Report on Form 10-Q for the quarterly period ended October 1, 2010 (the "Form 10-Q") for the purpose of re-filing Exhibit 10.2 to the Form 10-Q. No other changes have been made to the Form 10-Q. This Amendment No. 2 to the Form 10-Q speaks as of the original filing date and has not been updated to reflect events occurring after the original filing date.

PART II. OTHER INFORMATION

Item 6. Exhibits

Number	Description of Document
3.1(1)	Restated Certificate of Incorporation of Netlist, Inc.
3.2(1)	Amended and Restated Bylaws of Netlist, Inc.
10.1(2)	Amendment to Loan Documents entered into as of September 30, 2010, by and between Silicon Valley Bank and Netlist, Inc.
10.2(3)*	ASIC Design and Production Agreement between Open Silicon, Inc. and Netlist, Inc.
10.3(4)*	Design and Production Agreement relating to Register ASIC (the "Production Register Agreement"), dated July 31, 2008, by and between Netlist, Inc. and Toshiba America Electronic Components, Inc. ("Toshiba").
10.4(4)*	Amendment #1 to the Production Register Agreement, dated May 22, 2009, by and between Netlist, Inc. and Toshiba.
10.5(4)*	Amendment #1 to the Production Register Agreement, dated January 28, 2010, by and between Netlist, Inc. and Toshiba.
10.6(4)*	Amendment #2 to the Production Register Agreement, dated March 10, 2010, by and between Netlist, Inc. and Toshiba.
10.7(4)*	Design and Production Agreement relating to ID ASIC (the "Production ID Agreement"), dated July 31, 2008, by and between Netlist, Inc. and Toshiba.
10.8(4)*	Amendment #1 to the Production ID Agreement, dated January 28, 2010, by and between Netlist, Inc. and Toshiba.
10.9(4)*	Amendment #2 to the Production ID Agreement, dated March 10, 2010, by and between Netlist, Inc. and Toshiba.
10.10(4)*	Development and Supply Agreement, dated as of September 10, 2008, by and between Netlist, Inc. and Diablo Technologies, Inc. ("Diablo").
10.11(4)*	Settlement Agreement and Amendment to Development and Supply Agreement, dated January 12, 2010, between Netlist, Inc. and Diablo.
31.1(3)	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as Amended.
31.2(3)	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as Amended.
32(2)	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and furnished herewith pursuant to SEC Release No. 33-8238.

(1) Incorporated by reference to the corresponding exhibit number of the registration statement on Form S-1 of the registrant (No. 333-136735) filed with the Securities and Exchange Commission on October 23, 2006.

(2) Incorporated by reference to the corresponding exhibit number of the quarterly report on Form 10-Q of the registrant filed with the Securities and Exchange Commission on November 16, 2010.

(3) Filed herewith.

(4) Incorporated by reference to the corresponding exhibit number of the quarterly report on Form 10-Q/A of the registrant filed with the Securities and Exchange Commission on April 1, 2011.

* Confidential treatment has been requested with respect to portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934 and these confidential portions have been redacted from the filing made herewith. A complete copy of this exhibit, including the redacted terms, has been separately filed with the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 24, 2011

NETLIST, INC.
a Delaware corporation
(Registrant)

By: _____ /s/ Chun K. Hong
Chun K. Hong
President, Chief Executive Officer and
Chairman of the Board
(Principal Executive Officer)

By: _____ /s/ Gail M. Sasaki
Gail M. Sasaki
Vice President and Chief Financial
Officer
(Principal Financial Officer)

EXHIBIT INDEX

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ASIC DESIGN AND PRODUCTION AGREEMENT

between

OPEN-SILICON, INC.
490 N. McCarthy Blvd., Suite 220
Milpitas, CA 95035

and

NETLIST, INC.
51 Discovery, Suite 150
Irvine, CA 92618

Customer Contact:

Telephone No:

Fax No.:

Email Address:

August 11, 2010

Effective Date

OPEN-SILICON ASIC DESIGN AND PRODUCTION AGREEMENT

THIS ASIC DESIGN AND PRODUCTION AGREEMENT (this “**Agreement**”) is made and entered as of August 11, 2010 (the “**Effective Date**”) by and between **OPEN-SILICON, INC.**, a Delaware corporation with its principal place of business at 490 North McCarthy Boulevard, Suite 220, Milpitas, California 95035 (“**Open-Silicon**”) and **NETLIST, INC.**, a Delaware corporation with its principal place of business at 51 Discovery, Suite 150, Irvine, California 92618 (“**Customer**”), for purposes of setting forth the terms and conditions governing the manufacture and sale by Open-Silicon of one or more ASIC devices for Customer, as further specified in one or more Statements of Work (each, a “**Statement of Work**” or “**SOW**”) attached hereto as **Exhibit A** and incorporated herein.

1. DEFINITIONS. Any capitalized terms that are used herein shall have the meanings set forth below or, if not set forth below, the meanings ascribed to them in the other exhibits to this Agreement.

1.1 “Delivery Release” means Customer’s authorization to ship a definite quantity of Products on a specified schedule.

1.2 “Design Respin” is a redesign of a Product due to a deficiency in the initial design of the Product, as evidenced in the Prototypes.

1.3 “Intellectual Property Rights” shall mean all intellectual property rights, including, without limitation, patents, copyrights, authors’ rights, mask work rights, trademarks, trade names, know-how and trade secrets, irrespective of whether such rights arise under U.S. or international intellectual property, unfair competition or trade secret laws.

1.4 “IP Provider” is a third party provider of intellectual property and/or the embodiments of such intellectual property, by way of license, sale, or otherwise.

1.5 “**Macrocell**” shall mean the hardware implementation of any functions requested by Customer and furnished by Open-Silicon or its suppliers that Open-Silicon makes available for incorporation by Customer into a specified Product. \

1.6 “**Macrofunctions**” shall mean the software implementation of any functions requested by Customer and furnished by Open-Silicon or its suppliers that Open-Silicon makes available for incorporation by Customer into a specified Product.

1.7 “**Netlist**” shall mean the list form in Verilog or other format of a structural circuit implementation describing the basic design building blocks and their logical connections.

1.8 “**Product**” means an application specific integrated circuit (ASIC) described or referenced in a Statement of Work, and unless otherwise specified, refers to Production Units and Prototypes.

1.9 “**Project Technology**” means (i) the [***], all [***] files, all [***], any [***], and any [***] developed or created in the performance of this Agreement and (ii) all other information, know-how, data, specifications, designs and other technology, developed or created in the performance of this Agreement, and identified as deliverables under the applicable SOW (or otherwise in a writing signed by both parties) or are included in such deliverables.

1.10 “**Prototypes**” are engineering samples or the preliminary implementations on silicon of a specified Product, which are intended for internal use, and are not yet qualified and approved for production.

1.11 “**Prototype Approval**” occurs when Customer has completed the Prototype Approval Form attached hereto as **Exhibit B-1** , certifying that the Prototypes meet the agreed to specifications.

1.12 “**Production Units**” means product manufactured after Prototype Approval and Release to Production. Production Units do not include Prototypes or Risk Product.

1.13 “**Project**” shall mean the ASIC project specified in the applicable Statement of Work.

1.14 “**Purchase Order**” is Customer’s document setting forth specific Products ordered and including Delivery Release information.

1.15 “**Release to Production**” occurs when Customer has completed the Release to Production Form attached hereto as **Exhibit B-2** .

1.16 “**Risk Product**” is Product (other than Prototypes) ordered by Customer pursuant to a Delivery Release for a delivery date occurring before Release to Production. For the avoidance of doubt, Risk Product is ordered and ordered and purchased at Customer’s risk.

1.17 “**Services**” shall mean the ASIC design and manufacturing services to be performed by Open-Silicon (or by a third party on behalf of Open-Silicon) as set forth in a Statement of Work, and any related consulting services.

1.18 “**Statement of Work**” or “**SOW**” means a document which sets forth the responsibilities and deliverables of each party within the Project.

1.19 “**Subcontractor**” is a third party (other than an IP Provider) who provides services to a party in furtherance or fulfillment of its obligations to the other party under this Agreement .

1.20 “**Trigger Event**” means the occurrence of any of the following: (i) termination of this agreement by Customer pursuant to Section 9.1, (ii) termination or suspension (which lasts for 30 days) of this Agreement by Open-Silicon pursuant to section 9.2, (iii) Open Silicon becoming insolvent, otherwise unable to pay its debts as they mature, making an assignment for the benefit of creditors or files, or has filed against it (which is not dismissed in thirty (30) days), any claim for an action in bankruptcy or under any other debtor, insolvency, liquidation or other similar laws, (iv) Open Silicon dissolves, or otherwise ceases doing business in the ordinary course; or (v) transition of the manufacturing to a replacement foundry pursuant to Section 5.3 is not completed within thirty (30) days of the discontinuance of the foundry process.

2. ASIC DEVELOPMENT AND PRODUCTION.

2.1 Development Services. The development activities for Products covered by this Agreement shall be set forth in one or more SOWs developed and mutually agreed to by the parties. Each SOW shall set forth the responsibilities and deliverables of each party regarding the development of the Products. Each party will perform its obligations and deliver its

deliverables as set forth in and in accordance with the applicable SOW, and each party will cooperate with the other for the timely achievement of Project milestones. In performing the Services, Open-Silicon shall provide its own personnel, equipment, tools and other materials at its own expense. Customer will promptly acknowledge the completion of each milestone (at the request of Open-Silicon, such acknowledgement shall be in writing in substantially the form of **Exhibit D**). Customer acknowledges and agrees that Open-Silicon's ability to perform the Services and to deliver its deliverables may be dependent upon Customer's timely delivering certain deliverables or information as set forth in the applicable SOW. In the event that Open-Silicon cannot timely meet its development or delivery obligations due late delivery of such Customer deliverables and/or information, the parties shall renegotiate in good faith any affected schedule as reasonably necessary in light of the extent and nature of the delay.

2.2 ECO Process. Open-Silicon will use [***] to implement Customer's requests for changes to the SOW and/or the design of the Products (" **Change(s)** "), provided such Changes are technically feasible. Customer will submit requested Changes in writing. Open-Silicon will promptly evaluate such requests and inform Customer in writing of the potential effects on the SOW (and the basis for Open-Silicon's determination), including: (i) effect on the original schedule, (ii) effect on the engineering development charges, (iii) effect on the estimated production unit pricing due to die size, package or other changes, and (iv) other relevant factors. Any Changes that are mutually agreed to in writing shall be documented in accordance with Open-Silicon's Engineering Change Order process (" **ECO Process** ") described in **Exhibit C** . The parties will discuss in good faith any requested Changes and any impacts of pricing and scheduling of such Changes. Unless Changes are mutually agreed to in writing by the parties, the parties will continue their respective activities under the SOW without making any modifications to the SOW and/or the design of the Products.

2.3 Delivery of Prototypes. Upon completion of the engineering milestones specified in the SOW, Open-Silicon will manufacture and deliver the Prototype units to Customer in accordance with the SOW. Open-Silicon shall test each Prototype with the test program as specified in the SOW prior to delivery and shall provide all test results to Customer together with the Prototypes (provided, however, that such test results shall not be binding on Customer). The parties' activities in such regard will be further defined within the SOW. Customer acknowledges the Prototypes are delivered and intended for evaluation purposes only and are not intended for other use or resale for use in any system or application.

2.4 Prototype Evaluation. Customer will promptly evaluate the Prototypes and advise Open-Silicon in writing whether the Prototypes conform to agreed upon specifications for the Product, as set forth in the SOW. The prototype evaluation period shall not exceed [***] after shipment of initial prototypes (the " **Prototype Evaluation Period** "). If Customer concludes during the Prototype Evaluation Period, that the Prototypes are not conforming, then Customer will submit a written notice of rejection (" **Notice of Prototype Rejection** ") to Open-Silicon describing in reasonable detail the perceived deficiency or nonconformance of the prototype. If the Customer does not submit a notice of rejection to Open-Silicon during the Prototype Evaluation Period, the Prototypes will be deemed accepted. Customer may accept the Prototypes prior to the expiration of the Prototype Evaluation Period by signing and submitting to Open-Silicon a Prototype Approval Form attached hereto as **Exhibit B-1** .

2.5 Effect of Notice of Prototype Rejection. If Customer submits a Notice of Prototype Rejection, the Parties will mutually cooperate to determine the source of any Prototypes nonconformance stated in the Notice of Prototype Rejection. Further, Customer and Open-Silicon will cooperate to resolve and, as appropriate, to develop and implement a corrective action plan, to remedy all reported defects. Open-Silicon shall deliver a corrected version of such Prototype within a reasonable period of time given engineering time and manufacturing lead times. The process detailed in Sections 2.2, 2.3 and 2.4 shall be repeated until the Prototypes successfully pass Customer's evaluation in accordance with Section 2.3 (" **Conforming Prototypes** "), and the cost for such repeated procedure shall be borne by Open-Silicon; provided, however, that if a Design Respin is required for any reason other than an error or deficiency resulting from the design services provided by Open-Silicon or its Subcontractors, Customer will be liable for the costs associated with the Design Respin. If Open-Silicon fails to deliver Conforming Prototypes after the foregoing procedure is [***] Open-Silicon shall be deemed to be in material breach of this Agreement and Customer may, in its sole discretion either (i) grant Open-Silicon an [***], or (ii) immediately [***] or the applicable [***] and require a [***] of any [***] to [***] related to such Prototype.

2.6 Changes to Functionality or Performance. In the event that Customer desires to change the functionality or performance of the Product (either before or after delivery of Prototypes) and receive new Prototypes prior to Release to Production, Customer and Open-Silicon will develop a new mutually agreed upon SOW or will amend the existing SOW, in accordance with the ECO Process set forth in Section 2.1.

2.7 Risk Product. Prior to Release to Production, Customer may request the delivery of Risk Product. The provision by Open-Silicon of Risk Product to Customer will be subject to the terms of this Section 2.6, as well as such other terms and conditions separately agreed to by the parties. CUSTOMER ACKNOWLEDGES AND AGREES THAT RISK PRODUCT IS MANUFACTURED SOLELY AS AN ACCOMODATION TO CUSTOMER AND WILL BE PROVIDED "AS IS" AND "WITH ALL FAULTS", WITHOUT ANY WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS, AND QUALITY, AND ALL WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE . Customer assumes full responsibility and liability for Risk Product, including but not limited to all work in process (WIP) without regard to issues of design or performance.

2.8 Acceptance Prior to Manufacturing. Open-Silicon will not commence production of Production Units until Customer confirms the Release to Production of the Product by signing and submitting a Release to Production Form attached hereto as **Exhibit B-2** , and submitting a purchase order for the units as set forth in Section 4.1.

2.9 Escrow. Within [***] after the Effective Date, Open-Silicon and Customer will enter into a technology escrow agreement (the “ **Escrow Agreement** ”), with terms reasonably satisfactory to both parties, with [***] or another escrow agent designated by Customer (“ **Escrow Agent** ”). Thereafter, Open-Silicon will deposit with the Escrow Agent the following items on a regular basis (*i.e.* , as soon as they are developed or created) during the term of this Agreement: (a) all Project Technology developed, created or obtained by or for Open-Silicon, and (b) such additional [***] in [***] possession necessary or useful to enable a [***] or other relevant vendors to [***] and collectively with the Project Technology, “ **Escrow Materials** ” Open-Silicon will use commercially reasonable efforts to ensure that the Escrow Materials deposited with the Escrow Agent are kept current. Customer shall be responsible for any and all payments to the Escrow Agent associated with such Escrow Agreement; provided that in the event of [***] (other than [***] of this Agreement by [***] pursuant to [***]) Open-Silicon will be responsible to pay, or if already paid by Customer, reimburse Customer for, any such costs. The parties agree, and the Escrow Agreement will specify, that upon receipt by the Escrow Agent of a written notice from [***] that a [***] has occurred, all Escrow Materials will immediately be released and delivered to Customer. Open-Silicon hereby grants to Customer a perpetual, irrevocable, fully paid-up, royalty-free, non-exclusive, sublicenseable, worldwide, license; (i) to use, copy, reproduce, modify, translate, and make derivative works based on the Manufacturing Data and (ii) distribute the Manufacturing Data (or derivatives thereof) to a contractor (e.g., a fab) to have such contractor produce a mask for the Products and use such mask to manufacture Products. Customer hereby covenants that it will not exercise its rights under the foregoing license until the occurrence of a Trigger Event. Customer further agrees that Project Technology created or developed by Open-Silicon hereunder will not be used by Customer to perform the Services on its own or transfer the Services (or a portion thereof) to a third-party unless and until Open-Silicon agrees thereto in writing or a Trigger Event occurs.

3. COMPENSATION FOR DESIGN SERVICES.

3.1 NRE Fees. Design engineering charges for Product development are set forth in the applicable SOW and are based on the specifications and assumptions therein (“ **NRE Fees** ”). Customer will pay the NRE Fees in accordance with the milestone schedule set forth in the applicable SOW. Unless otherwise specified in the SOW, Open-Silicon will invoice Customer upon successful completion of each such milestone (which shall be determined in accordance with the acceptance criteria and procedure set forth in this Agreement and the applicable SOW). Payments relating to a milestone, the completion of which has been acknowledged by Customer, are [***]. Payment of NRE Fees will be payable within [***] after Customer’s receipt of the invoice. If Customer requests changes to the specifications or the SOW that increase the cost of the development, Open-Silicon will evaluate the requested changes and notify Customer in writing of the increased costs that Customer will be required to pay, in accordance with Section 2.1.

3.2 Taxes. Each party shall bear and be responsible to pay any tax (and any related interest or penalty), however designated, legally imposed upon it with respect to the design and development activities contemplated by this Agreement.

4. FORECASTING AND ORDERS FOR PRODUCTION UNITS.

4.1 Forecasts. Following Release to Production, Customer shall provide Open-Silicon, on a monthly basis, good-faith, non-binding rolling forecasts of its purchase requirements for the Production Units, [***] following the month in which the forecast is submitted (each, a “ **Forecast** ”). Any Forecasts provided by Customer are for planning purposes only and do not constitute a Delivery Release or other commitment by Customer. Customer shall have no obligation with respect to the purchase of Products under this Agreement until such Products are specified in an issued Purchase Order that contains specific Delivery Release dates for specific Products.

4.2 Purchase Orders. Customer may order Production Units from time to time by issuing a purchase order to Open-Silicon for such units. Open-Silicon shall confirm its receipt of such purchase order within [***] in a written acknowledgment to Customer. Such purchase order shall not request delivery inconsistent with the applicable lead time (as set forth in the applicable SOW) without a line item for the appropriate expedite fees. Customer’s purchase orders and Forecasts may [***] for Production Units set forth in the applicable SOW. Open-Silicon will not be obligated to make shipments [***]. Any Customer purchase order received by Open-Silicon that complies with the foregoing (a “ **Purchase Order** ”) shall be binding on Customer and Open-Silicon. All Purchase Orders and Open-Silicon’s acknowledgements shall be subject to and expressly limited to the terms and conditions of this

Agreement and the applicable SOW and any terms or conditions contained in Purchase Orders or acknowledgements (or in other documents issued by either party) that are inconsistent with or in addition to the terms and conditions contained in this Agreement or the applicable SOW shall be of no force or effect, regardless of any failure of Open-Silicon or Customer to object to such terms or conditions, unless expressly accepted in writing by both parties.

4.3 Supply Commitment . During the term of this Agreement, Open-Silicon agrees to supply to Customer one-hundred percent (100%) of Customer’s requirements for the Production Units, as specified in Purchase Orders that are not in excess of one hundred and fifty percent (150%) of the then-current Forecast. Notwithstanding the foregoing, Customer understands that yields for Production Units are subject to fluctuations; therefore, Customer will accept delivery of and accept as full performance: (a) plus five percent (5%) or (b) minus ten percent (10%) of the total quantity ordered, with price adjusted for the quantity actually delivered.

5. CANCELLATION AND RESCHEDULING OF ORDERS.

5.1 Cancellation. Upon notice to Open-Silicon, Customer may cancel any Purchase Order or portion thereof at any time, subject only to the applicable cancellation fees set forth below:

Time of cancellation	Cancellation fee (percentage of sales price of cancelled units)
[***] weeks or more prior to the delivery date	None
[***] weeks prior to the delivery date	25%
[***] weeks prior to the delivery date	50%
[***] weeks prior to the delivery date	100%

Notwithstanding the above, Open-Silicon shall use commercially reasonable efforts to mitigate any damages or expenses it may incur due to Customer’s cancellation of a Purchase Order (or a portion thereof) by redeploying the Production Units ordered in such Purchase Order to other Purchase Orders of Customer, and Customer’s payment obligation under this Section shall be reduced accordingly. For purposes of this Section 5.1, “delivery date” with respect of any Purchase Order or portion thereof which has been rescheduled under Section 5.2 shall be deemed to mean the delivery date prior to any rescheduling; provided, however, that any rescheduling of more than thirteen (13) weeks prior to the delivery date shall be deemed a new Purchase Order with a new delivery date.

5.2 Rescheduling. Each Purchase Order may be deferred by Customer no more than [***] time and by no more [***], subject to the terms of this Section 5.2. Customer acknowledges and agrees that the right to defer or reschedule an order will be subject to the scheduling flexibility of the foundry. Moreover, Customer agrees that, in the event that Customer requests to reschedule an order as permitted by this Section 5.2, Customer shall be responsible for reimbursing any costs incurred by Open-Silicon as a result of such rescheduling. Notwithstanding the foregoing, any Purchase Orders with scheduled delivery dates beyond the applicable lead time may be rescheduled by Customer at any time upon written notice to Open-Silicon, provided that [***] shall be [***] incurred by Open-Silicon as a result of accommodating Customer’s request.

5.3 Process Discontinuance by Foundry. If for any reason, Open-Silicon’s third party foundry supplier discontinues a process, Open-Silicon shall give Customer written notice thereof [***] prior to the last date on which Customer can place an order for Production Unit(s) to be affected by such process discontinuance, and will use its diligent efforts to provide Customer with longer than [***] notice of same. If such foundry discontinues or is expected to discontinue a process, Open-Silicon shall [***] to transition the manufacturing of Products to a replacement foundry (as designated by Customer and agreed in the SOW or an ECO thereto) and shall provide such replacement foundry with all information (including, without limitation, [***]), cooperation and assistance [***] to effect a smooth and seamless transition.

6. Title and Delivery.

6.1 Deliveries. All shipments to delivery destinations are made [***] at the [***]. All Products shall be deemed accepted by Customer upon delivery at point of shipment, subject to the Limited Product Warranty set forth in Section 10. Title to Production Units and risk of loss pass to Customer, or in the case of a Drop Shipment (as defined below), to the receiving party of the shipment (unless such receiving party is serving as Customer’s agent, in which event, title and risk of loss will pass to Customer), upon [***]. In the absence of written instructions from Customer, all Products shall be packed and prepared for shipment in a manner that: (i) follows good commercial practice; (ii) is acceptable to common carriers for shipment at the lowest rate; and (iii) is adequate to ensure safe arrival. Open-Silicon shall mark all containers with Purchase Order number, lot tracking information, date of shipment, and Customer’s and Open-Silicon’s names, provided in the event that any shipments are made to Customer’s customers (“**Drop Shipments**”), upon Customer’s request, Open-Silicon’s name will be omitted from the containers. Shipment of Production Units may originate from either Open-Silicon or its Subcontractors or authorized distributors.

6.2 Delivery Timeframes. Open-Silicon will deliver Products in accordance with the delivery dates set forth in Customer's Purchase Order. In the event that Production Units ordered in a Purchase Order are delivered late solely due to Open-Silicon's (excluding its Subcontractors') delay, Customer will be entitled to deduct from the payments otherwise due to Open-Silicon for such Purchase Order an amount equal to [***] of the total amount of such payments for each week the shipment is late, [***] provided, however, that if the delayed Production Units are delivered to Customer within [***] of the scheduled delivery date, such deduction will be waived. Without limiting the generality of the foregoing, Open-Silicon will give Customer prompt notice if it reasonably expects a delay in meeting a delivery date or that only a portion of the Products will be available for shipment to meet a delivery date, and Open-Silicon will specify the reasons therefor. For partial shipments, Open-Silicon will ship the available Products unless directed by Customer to reschedule a shipment. Customer may specify a delivery destination other than its own premises (e.g., Drop Shipment) in order to facilitate delivery directly to its customers. Open-Silicon does not require that delivery be made directly to Customer. For the avoidance of doubt, Customer will be responsible for all costs relating to shipment.

6.3 Early Deliveries. If Products are delivered more than [***] in advance of the Delivery Dates, Customer may, at its option, either return the Products at Open-Silicon's expense or keep the Products with payment due as provided in this Agreement.

6.4 Die Banking. Open-Silicon will provide die banking services to Customer in accordance with the terms and conditions of **Exhibit E** ("Die Banking"). Customer shall order sufficient material be held in die bank to assure continued supply of product within its Forecast.

7. PRODUCTION UNITS PRICING AND PAYMENT.

7.1 Pricing. Product pricing is set forth in the SOW. Both parties acknowledge and agree that pricing will not be known until die size is fixed and actual performance frequency and yield of the design is established. If die size increases or performance/yield is marginal, then Open-Silicon may in good-faith increase pricing in accordance with such changes and to the extent that such price increase shall be reasonable

7.2 Payment. Unless otherwise agreed, payment terms are [***] from receipt of invoice by Customer. For overdue invoices that are not reasonably disputed by Customer, Customer will pay Open-Silicon interest on the overdue amount at a rate of [***] for each month or part of a month (or the maximum rate allowed by law, whichever is less) that the payment is overdue. For the avoidance of doubt, for Product invoices, Open-Silicon will invoice Customer upon Product shipment, unless shipment is not made (at Customer's request), in which event, Open-Silicon will invoice Customer when such Product is ready for shipment. Unless otherwise instructed by Open-Silicon in writing, all amounts payable to Open-Silicon shall be paid by company check, tendered to such address as Open-Silicon shall designate in an invoice or other notice. Should the parties agree that payments will be made by wire transfer, then Customer shall instruct the paying financial institution to route all domestic wire transfers via FEDWIRE).

7.3 Taxes. Customer is responsible for and will pay any tax on Production Units. The prices specified in each applicable quote and/or SOW excludes all duties, taxes and excises and specifically excludes value-added tax (VAT) relating to Production Units. Open-Silicon shall separately state such taxes if it is required by law to collect such taxes, and Customer agrees to pay such amounts. The parties will reasonably cooperate to take advantage of benefits provided by any tax treaties.

8. TERM.

This Agreement shall commence as of the Effective Date and, subject to Section 0 below and unless earlier terminated in accordance with Section 9 ("Termination"), shall remain in force for a period of ten (10) years, except that Sections 2 and 3 will expire two (2) years after the Effective Date.

9. TERMINATION.

9.1 Termination for Cause. Either party may terminate this Agreement and/or any or all SOWs upon at least thirty (30) days prior written notice if the other party materially breaches any term or condition hereof and fails to cure the breach within the notice period. The parties acknowledge that any breach of Sections 4.2 or 7.1 shall be deemed a material breach of this Agreement.

9.2 Termination for Infringement. Open-Silicon may, upon written notice to Customer, suspend its obligations under an SOW in respect of certain Products where Open-Silicon reasonably believes, after good faith discussions with Customer, that a third party suit or action brought against Open-Silicon and/or Customer alleging that the design, manufacture, or sale of such Products violates the intellectual property rights of the third party has merits. A suspension under this Section 9.2 that continues for more than nine (9) months shall be deemed a termination of the SOW for such Products.

9.3 Termination for Business Discontinuity. Either party may terminate this Agreement and/or any or all SOWs in the event that the other party (a) becomes insolvent, otherwise unable to pay its debts as they mature, makes an assignment for the benefit of creditors, or files, or has filed against it (which is not dismissed in thirty (30) days), any claim for an action in bankruptcy or under any other debtor, insolvency, liquidation, or other similar laws, or (b) dissolves, or otherwise ceases doing business in the ordinary course.

9.4 Effect of Termination. Upon termination, each party will return to the other, or at the other party's request, destroy (and certify in writing as to such destruction), all Confidential Information in such party's possession provided by the other party, provided that (i) in the event that there is any dispute arising out of or relating to this Agreement or the termination thereof, each party will be permitted to retain such information as may be relevant to resolution of that dispute but use such information solely in the resolution of the dispute and not for any other purpose, including but not limited to, any commercial use, and when such dispute is resolved, each party will return the retained Confidential Information to the other party; (ii) Open-Silicon will be permitted to retain such information as is necessary for Open-Silicon to perform its surviving obligations under this Agreement; and (iii) Customer will be permitted to retain such information as is necessary for Customer to perform its surviving obligations or exercise surviving rights under this Agreement. Customer remains liable to pay Open-Silicon for Products and Services received (and accepted, if applicable) through the respective date of termination, and any applicable cancellation charges hereunder. In the event that termination is by Customer pursuant to Sections 9.1 or 9.3, the rights granted in Section 13.5 with respect to any IP Provider technology of Intellectual Property Rights shall be transferred and deemed to be direct from IP Providers to Customer, and Open-Silicon hereby appoints Customer to act as its attorney-in-fact to provide notice of the events in Section 9.1 or 9.3 to such IP Providers in order to effect such transfer. The following sections will survive any expiration or termination of this Agreement: Section 1 ("Definitions"); Section 2.6 ("Risk Product") (solely with respect to the warranty disclaimer), Section 2.8 ("Escrow"); Section 3 ("Compensation for Design Services") (solely with respect to amounts incurred upon or prior to expiration or termination); Section 7 ("Production Units Pricing and Payment"); Section 9 ("Effect of Termination"); Section 10 ("Limited Product Warranty; Disclaimer") (solely with respect to the warranty disclaimers); Section 11 ("Limitation of Liability"); Section 12 ("Confidentiality and Publicity"); Section 12.5 ("Intellectual Property Ownership; Licensing") (except for Section 13.3); Section 14 ("Indemnification"); Section 17 ("Governing Law"); and Section 18 ("Miscellaneous"). Notwithstanding anything to the contrary, upon any termination or expiration of this Agreement, Customer shall be permitted to sell all remaining inventory of Products in Customer's possession, and to retain all Prototypes and related design information to permit providing maintenance and support services to its customers.

10. LIMITED PRODUCT WARRANTY; DISCLAIMER.

10.1 Limited Product Warranty. Open-Silicon warrants solely to Customer that Production Units delivered hereunder will conform to the form, fit, and function of the Prototypes approved by Customer and, if properly used, will be free from defects in material and workmanship for one (1) year following the date of receipt of the Production Units by Customer. Except as expressly set forth in this Agreement (or an SOW), Open-Silicon makes no warranty with respect to any Services, Prototypes, or Risk Product. Open-Silicon makes no warranty to any third parties.

10.2 Remedy. If any Production Unit furnished by or for Open-Silicon fails to conform to the warranty provided in Section 10.1 ("Limited Product Warranty"), Open-Silicon's sole and exclusive liability and Customer's sole and exclusive remedy will be, at Open-Silicon's option and expense, to promptly repair or replace the Production Unit, or if repair or replacement is not technically feasible, refund to Customer an amount equal to the price paid for any such Production Unit which fails during the applicable warranty period, provided that: (a) Customer notifies Open-Silicon in writing during the warranty period indicated above that such Production Unit is defective and furnishes an explanation of the deficiency; (b) upon Open-Silicon's request, such Production Unit is returned, either to Open-Silicon's service facility or to such other facility designated by Open-Silicon, at Open-Silicon's risk and expense; and (c) the claimed deficiencies exist and were not caused by accident, misuse, neglect, improper installation, improper testing or unauthorized alteration or repair (all of which will operate to void the warranty provided herein). If such Production Unit is defective, and Open-Silicon elects to repair or replace it, the transportation charges for the repaired or replaced Production Unit from Open-Silicon to Customer within the USA will be paid by Open-Silicon. For all other locations, the Limited Product Warranty excludes all costs of shipping, duty, customs clearance, and other related charges. A repaired or replaced Production Unit will continue to be warranted for the longer of one (1) year from the original shipment date of the defective Production Unit or ninety (90) days after Customer receives the replacement or repaired Production Unit. All Production Units returned to Open-Silicon shall be returned in accordance with Open-Silicon's return material authorization procedure. **IN NO EVENT WILL OPEN-SILICON BE LIABLE FOR ANY OTHER COSTS ASSOCIATED WITH THE REPAIR OR REPLACEMENT OF PRODUCTS, INCLUDING LABOR, INSTALLATION, OR OTHER COSTS INCURRED BY CUSTOMER AND, IN PARTICULAR, ANY COSTS RELATING TO THE REMOVAL OR REPLACEMENT OF ANY PRODUCTS SOLDERED OR OTHERWISE PERMANENTLY AFFIXED TO ANY PRODUCT, ASSEMBLY, OR COMPONENT. THE REMEDY SET FORTH IN THIS SECTION 10.2 ("REMEDY") IS CUSTOMER'S SOLE AND EXCLUSIVE REMEDY IN THE EVENT OF ANY CLAIM UNDER THE LIMITED PRODUCT WARRANTY PROVIDED IN SECTION 10.1 .**

10.3 Disclaimer. OPEN-SILICON NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY. OPEN-SILICON DISCLAIMS ALL LIABILITIES ARISING FROM ANY SERVICES PROVIDED BY A THIRD-PARTY (OTHER THAN OPEN-SILICON'S SUBCONTRACTORS OR FOUNDRY) OR THE USE OR INCORPORATION IN DESIGN PROVIDED BY CUSTOMER OF ANY PRODUCTS PROVIDED BY A THIRD PARTY, INCLUDING WITHOUT LIMITATION, ANY CIRCUITRY DESIGN COMPONENTS, INTELLECTUAL PROPERTY, IP CELLS, OR DESIGN LIBRARY ELEMENTS. EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT: (A) ALL SERVICES, PROTOTYPES, AND PRODUCTS (AS WELL AS ANY THIRD PARTY PRODUCTS AND SERVICES) ARE PROVIDED "AS IS" AND "WITH ALL FAULTS" AND OPEN SILICON MAKES NO WARRANTIES OR REPRESENTATIONS, WHETHER EXPRESS, IMPLIED OR STATUTORY CONCERNING THE FOREGOING, AND (B) OPEN SILICON DISCLAIMS ALL WARRANTIES WITH RESPECT TO THE SERVICES, PROTOTYPES, AND PRODUCTS, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, TITLE OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION, SAMPLE, OR COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

10.4 Third Party Technology. Customer will be responsible for all third party technology provided or requested by Customer to be included in the Product to ensure that such technology is compatible with, and suitable for, Customer's intended purposes and applications.

11. LIMITATION OF LIABILITY.

11.1 Consequential Damages Disclaimer. EXCEPT WITH RESPECT TO BREACH OF [***] AND LIABILITY ARISING UNDER SECTIONS 14 ("INDEMNIFICATION"), IN NO EVENT WILL EITHER PARTY OR ITS SUPPLIERS BE LIABLE FOR ANY INCIDENTAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES WITH RESPECT TO PERFORMANCE OF ITS OBLIGATIONS UNDER THIS AGREEMENT, INCLUDING WITHOUT LIMITATION LOST PROFITS, INTERRUPTION OF BUSINESS, OR COST OF PROCUREMENT OF ANY SUBSTITUTE GOODS OR SERVICES, REGARDLESS OF WHETHER SUCH PARTY HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

11.2 Damages Limitation. EXCEPT WITH RESPECT TO A BREACH OF SECTION 12 ("CONFIDENTIALITY AND PUBLICITY"), IN NO EVENT WILL EITHER PARTY'S TOTAL CUMULATIVE LIABILITY TO THE OTHER PARTY ARISING OUT OF OR RELATED TO THIS AGREEMENT EXCEED THE HIGHER OF (A) THE AMOUNTS PAID OR PAYABLE BY CUSTOMER TO OPEN-SILICON UNDER THIS AGREEMENT, AND (B) AN AMOUNT EQUAL TO THE NRE FEES PAID OR TO BE PAID BY CUSTOMER UNDER THIS AGREEMENT.

11.3 Indemnity. IN NO EVENT OTHER THAN AS STATED IN SECTION 14 ("INDEMNIFICATION") WILL OPEN-SILICON BE OBLIGATED TO INDEMNIFY CUSTOMER OR ANY THIRD PARTY WITH RESPECT TO ANY CLAIM ARISING OUT OF OR RELATED TO THIS AGREEMENT.

11.4 Limitations Essential. THE PARTIES ACKNOWLEDGE THAT THESE LIMITATIONS ON POTENTIAL LIABILITIES WERE AN ESSENTIAL ELEMENT IN SETTING CONSIDERATION UNDER THIS AGREEMENT AND THAT, IN THE ABSENCE OF SUCH LIMITATIONS, THE ECONOMIC TERMS OF THIS AGREEMENT WOULD BE SUBSTANTIALLY DIFFERENT. LIABILITY FOR DAMAGES SHALL BE LIMITED AND EXCLUDED, EVEN IF ANY EXCLUSIVE REMEDY PROVIDED FOR IN THIS AGREEMENT FAILS OF ITS ESSENTIAL PURPOSE.

12. CONFIDENTIALITY AND PUBLICITY.

12.1 Confidential Information. "Confidential Information" means all information, trade secrets, technology and other materials disclosed or otherwise made available by one party (the "**Discloser**") to the other party (the "**Recipient**"), whether before, on or after the Effective Date, (i) in a tangible form marked "Confidential", "Proprietary" (or with similar legend), (ii) in intangible form or orally and expressed as being confidential at the time of disclosure and confirmed as being confidential in a writing delivered to Recipient within thirty (30) days after initial disclosure, or (iii) under circumstances indicating it is confidential or proprietary. Confidential Information may be owned by a third party, including a Subcontractor or IP Provider. Neither party will disclose this Agreement any SOW or their terms, to any third party without the specific, written consent of the other. Without limiting the foregoing, Project Technology shall be deemed Confidential Information of Customer. Customer acknowledges that Project Technology may include Confidential Information of Open-Silicon.

12.2 Duties in Respect of Confidential Information.

(a) Recipient agrees not to use Confidential Information or disclose such Confidential Information except as expressly permitted under this Agreement or as expressly agreed in writing by the Discloser. Each party shall use Confidential Information disclosed to it solely as permitted under this Agreement. Subject to the following, Recipient agrees to not disclose Confidential Information except to those employees and contractors of Recipient who have agreed to be bound by confidentiality obligations not less protective than that contained in this Agreement. Recipient has the right to use and disclose Confidential Information reasonably in connection with the exercise of its rights or performance of its obligations under this Agreement, subject to confidentiality obligations no less protective of such Confidential Information as the terms and conditions contained in this Agreement. Recipient shall exercise the same degree of care to prevent unauthorized use or disclosure of Confidential Information as it takes to preserve and safeguard its own confidential information of similar importance, but in any event, no less than a reasonable degree of care. Notwithstanding any other provision of this Agreement or any SOW, Open-Silicon's provision to Customer of anything which contains confidential information or materials of third parties is conditioned on Open-Silicon's receipt of documentation showing that such third parties permit Customer to receive such confidential information or materials.

(b) Open-Silicon agrees not to, directly or indirectly (including, without limitation, through Subcontractors), engage in any design or manufacture of products or technology that are Similar to the products for the following companies and their affiliates: [***]. Notwithstanding the provisions of Section 12.2(b), licensing of software and/or technology that Open-Silicon makes generally available shall not be deemed a violation of this provision even if such software and/or technology is used by one of the enumerated companies or their affiliates in products Similar to the Products. As used in this Section 12.2(b), "Similar" means identical to, substantially similar to, or comprising the same form, fit and function as, the Products.

12.3 Compelled Disclosure. If disclosure of Confidential Information is required by applicable law: (i) the Parties shall use all legal means available to minimize the disclosure to third parties of the Confidential Information; (ii) the Recipient compelled to make disclosure shall inform the Discloser at least ten (10) business days in advance of the disclosure or, if such notice is impossible, as soon as possible; and (iii) the Recipient compelled to make disclosure shall make reasonable efforts to give the Discloser a reasonable opportunity to review and comment upon the disclosure, and any request for confidential treatment or a protective order pertaining thereto, prior to making such disclosure, provided that it is not impracticable to do so.

12.4 Exceptions. The Recipient shall be relieved of its duties in respect of specific Confidential Information to the extent that any such information: (a) falls into the public domain or becomes publicly known through no fault of Recipient (or its personnel or Subcontractors); (b) becomes known to Recipient, without restriction, from a third party through no breach of trust or an obligation of confidentiality; and/or (c) was independently developed by Recipient without use of the Confidential Information and by employees or contractors of Recipient who had no access to any Confidential Information of Discloser and have not been involved in performance of this Agreement. The burden of proof of the existence of an exception shall be on Recipient. The Parties may disclose this Agreement and SOWs in confidence to their respective legal counsel, accountants, bankers, and other similar advisors, and financing sources, including potential acquirers or merger partners, as necessary in connection with obtaining services from such third parties or the negotiating of an acquisition or merger.

12.5 Publicity. Neither party may use the other party's name or trademarks in any type of advertisement materials, web sites, press releases, interviews, articles, brochures, business cards, project reference or client listings without the other's prior written consent except as may be required by law.

13. Intellectual Property Ownership; Licensing.

13.1 Ownership of Pre-Existing Technology. Other than the rights expressly granted or assigned in this Section 12.5, Open-Silicon or its licensors will own and retain all Intellectual Property Rights in any circuitry design components and process technology owned or controlled by Open-Silicon, alone and jointly with others, prior to the Effective Date, or developed by Open-Silicon independently of performing any Services for Customer, including, without limitation: (i) all base array layers, (ii) all library elements (including design cores, test vectors, test tapes, library elements, Macrocells and Macrofunctions), and (iii) all modifications to such library elements (collectively, the "Open-Silicon-furnished Technology"). Customer or its licensors shall own and retain all Intellectual Property Rights in all technology furnished by customer to Open-Silicon in connection with this agreement, including, without limitation, Customer-furnished specifications, VHDL, Netlists, databases, test vectors, test tapes, and library elements (collectively the "Customer-furnished Technology").

13.2 Project Technology . Customer shall solely and exclusively own all Project Technology and Open-Silicon hereby irrevocably assigns, and agrees to assign, to Customer all right, title and interest, including all Intellectual Property Rights, that Open-Silicon may have in and to any Project Technology. Customer agrees that Project Technology created or developed by Open-Silicon hereunder will not be used by Customer to perform the Services on its own or transfer the Services (or a portion thereof) to a third-party unless and until Open-Silicon agrees thereto in writing or a Trigger Event occurs.

13.3 Mask Ownership. Open-Silicon shall own the masks produced in connection with the performance of this Agreement (including any SOW) and all Manufacturing Data, subject to Customer's ownership of any Project Technology embodied or contained in the masks or Manufacturing Data. Open-Silicon agrees that such masks shall not be used for any purpose other than manufacture of Products for Customer unless otherwise agreed by Customer in writing. Open-Silicon shall destroy such masks upon written request from Customer and certify to Customer the destruction thereof. Effective upon a Trigger-Event, Open-Silicon hereby (a) authorizes Customer to obtain products directly from the third party foundry who has physical possession of such masks and agrees to execute any authorization reasonably required by such foundry and (b) grants to customer a transferable, nonexclusive, worldwide, perpetual, irrevocable license (with the right to sublicense to its affiliates and contractors) to manufacture, have manufactured, import, export, sell, offer for sale, use and otherwise exploit any products created using such masks.

13.4 Development License . Customer hereby grants to Open-Silicon, for the term of this Agreement, a limited, non-exclusive, personal, non-transferable license under Customer's Intellectual Property Rights in the Project Technology and Customer-furnished Technology to use the Project Technology and Customer-furnished Technology solely to perform its obligations under the Agreement.

13.5 License to Customer . If Open-Silicon incorporates any Open-Silicon-furnished Technology (including any technology provided by IP Providers) in any Project Technology, Open-Silicon hereby grants, under any of Open-Silicon's Intellectual Property Rights therein (including rights licensed to Open-Silicon from IP Providers), to Customer a transferable, nonexclusive, worldwide, perpetual, irrevocable license (with the right to sublicense to affiliates and contractors) to (a) develop and design (including, making modifications, updates, upgrades and enhancements), and to manufacture, have manufactured, import, export, sell, offer for sale, use and otherwise exploit any products or services; and (b) reproduce, display, modify, make derivative works of and distribute (as modified) such Open-Silicon-furnished Technology.

13.6 No Implied Licenses. Except as expressly set forth in this Agreement or any separate license agreement, the parties do not, directly or by implication, by estoppel or otherwise, grant to each other any rights or licenses, and neither party shall have any ownership rights in any intellectual or tangible property of the other. Any rights not expressly granted hereunder are retained by their respective owner(s).

14. INDEMNIFICATION.

14.1 Indemnification by Open-Silicon. Subject to the Limitation of Liability in Section 11.2 and subject to Section 14.2 ("Exclusions from Indemnifications by Open-Silicon"), Open-Silicon will defend or settle any third party claim, action, suit or proceeding brought against Customer based upon a claim that the Services or Production Units, alone and not in combination with any other product or service, constitute a direct infringement of any patent (in effect as of the Effective Date) or copyright issued under the laws of United States, Canada, European Union, Iceland, Norway, Switzerland, India, Israel, Taiwan, Hong Kong, Japan, Australia, or New Zealand, or misappropriation of any trade secret recognized as such under the Uniform Trade Secret laws, and will pay all damages and costs finally awarded against Customer in connection with such claim. Customer will: (i) promptly notify Open-Silicon in writing of any such suit or proceeding, (ii) provide Open-Silicon with sole control over the defense or settlement of any such claim or action; and (iii) provide reasonable information and assistance in the defense or settlement of any such claim or action. Customer may participate in any such suit or proceeding through counsel of its choice at Customer's own expense; provided that the costs associated with Customer's counsel shall not be deemed damages or costs for purposes of Open-Silicon's indemnity hereunder. Open-Silicon shall obtain Customer's prior written consent, which consent shall not be unreasonably withheld, to any settlement of any third party claim, action, suit or proceeding, except if the settlement is only for monetary damages and contains a full release of Customer from the claim.

14.2 Exclusions from Indemnification by Open-Silicon . Open-Silicon will not be liable for any expenses, damages, costs or losses arising out of or resulting from any suit or proceeding based upon a claim of intellectual property infringement to the extent arising from: (a) Open-Silicon's or its Subcontractor's use of or compliance with Customer's designs and specifications, or any Customer-furnished Technology, or (b) any alleged infringement based on protocols established by standards bodies.

14.3 Indemnification by Customer. Subject to the Limitation of Liability in Section 11.2 and subject to Section 14.4 (“Exclusions from Indemnifications by Customer”), Customer will defend or settle any third party claim, action, suit or proceeding brought against Open-Silicon based upon a claim of direct infringement of any patent (in effect as of the Effective Date) or copyright issued under the laws of United States, Canada, European Union, Iceland, Norway, Switzerland, India, Israel, Taiwan, Hong Kong, Japan, Australia, or New Zealand, or misappropriation of any trade secret recognized as such under the Uniform Trade Secret laws, arising from: (a) Open-Silicon’s or its supplier’s use of or compliance with Customer’s designs or specifications, or (b) any Customer-furnished Technology, and will pay all damages and costs finally awarded against Open-Silicon in connection with such claim. Open-Silicon will: (i) promptly notify Customer in writing of any such suit or proceeding, (ii) provide Customer with sole control over the defense or settlement of any such claim or action; and (iii) provide reasonable information and assistance in the defense or settlement of any such claim or action. Open-Silicon may participate in any such suit or proceeding through counsel of its choice at Open-Silicon’s own expense; provided, that the costs associated with Open-Silicon’s counsel shall not be deemed damages or costs for purposes of Customer’s indemnity hereunder. Customer shall obtain Open-Silicon’s prior written consent, which consent shall not be unreasonably withheld, to any settlement of any third party claim, action, suit or proceeding, except if the settlement is only for monetary damages and contains a full release of Open-Silicon from the claim. Notwithstanding the foregoing, Customer reserves the right (but shall have no obligation) to cancel the Project giving rise to a third party claim (or a threat thereof), which may be subject to an indemnity obligation under this Section 14.2.

14.4 Exclusions from Indemnification by Customer. Customer will not be liable for any expenses, damages, costs or losses to the extent arising out of or resulting from any suit or proceeding based upon a claim of intellectual property infringement that (a) the Services or Production Units alone and not in combination with any other product or service constitute a direct infringement of any patent (in effect as of the Effective Date) or copyright, or misappropriation of any trade secret recognized as such under the Uniform Trade Secret laws.

14.5 Entire Obligation; Exclusive Remedy. The foregoing states the entire obligation and exclusive remedy of each of the parties hereto with respect to any alleged intellectual property infringement regarding any Product, Intellectual Property Right, or Service furnished hereunder.

15. EXPORT.

Customer will not export, either directly or indirectly, any Open-Silicon-furnished Technology or any Product or system incorporating such Product without first obtaining any required license or other approval from the Government of the country into which the technology or product is imported (“Host Government”) or the U.S. Department of Commerce or any other agency or department of the Host Government or the United States Government.

16. ELECTRONIC TRANSACTIONS.

16.1 General. Subject to the terms and conditions of this Section 16.1, the parties agree to receive electronic documents and accept electronic signatures relating to transactions contemplated by this Agreement, including delivery releases, purchase orders, purchase order acknowledgments, invoices and other transactions as may be agreed by the parties from time to time. Electronic documents and electronic signatures shall be a substitute for paper-based documents and signatures, and the legal validity of a transaction will not be denied on the ground that it is not in writing. This Agreement may not be amended or terminated by these means.

16.2 Transmission of Electronic Documents. All electronic documents shall be transmitted through the use of EDI, XML or other web-based transmission formats. Electronic documents may be transmitted or received electronically directly by the parties or through designated third party communication network service providers with which either party may contract. Each party agrees to designate all transmissions as confidential and protect all electronic documents from improper or unauthorized access in accordance with Section 12 (“Confidentiality and Publicity”). Information contained in any electronic document or otherwise exchanged electronically between the parties shall be considered the confidential information of the disclosing party and shall be maintained in accordance with Section 12 (“Confidentiality and Publicity”).

16.3 “Electronic Signature” Defined. For purposes of this Agreement, an electronic signature shall mean information or data in electronic form that is attached to or logically associated with an electronic document and executed or adopted with the intent to sign the electronic document. An oral communication or a recording of an oral communication shall not qualify as an electronic signature. Nothing in this Section 16.2 shall be construed to limit or otherwise affect the rights of either party to assert that an electronic signature is a forgery, is used without authority, or otherwise is invalid for reasons that would invalidate the effect of a signature in written form.

17. GOVERNING LAW.

This Agreement is to be construed and interpreted according to the laws of the State of Delaware, excluding its conflict of laws provisions that would require the application of the laws of another state. **THE PROVISIONS OF THE UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS AND THE UNIFORM COMPUTER INFORMATION TRANSACTIONS ACT (UCITA) SHALL NOT APPLY TO THIS AGREEMENT.**

18. MISCELLANEOUS.

18.1 Restricted Use. Customer acknowledges and agrees that the Products are not designed, intended, or certified for use in components of systems intended for, or in relation to the operation of [***], or for any other application in which the failure of the Product could create a situation where [***] may occur, and Customer shall not use, sell, or otherwise distribute the Products for said uses.

18.2 Notices. Unless otherwise stated herein, written notices shall be delivered by hand, mail, fax, or email (with contemporaneous delivery by one of the foregoing means) to the persons and at the addresses as set forth below (in the case of Open-Silicon), or as set forth on the signature page of the Agreement (in the case of Customer). Either party may change its address for receipt of notice to the other party by delivering written notice of such change pursuant to this Section 18.2.

Open-Silicon, Inc.

490 N. McCarthy Blvd., Suite 220

Milpitas, CA 95035

Attn: Contract Management

18.3 Force Majeure. Except for the obligation to pay any amounts when due, neither party will be liable for any failure to perform acts due to unforeseen circumstances or causes beyond the parties' reasonable control. If any such circumstances occur, the affected party's time for delivery or other performance will be extended for a period equal to the duration of the delay caused thereby, provided that the party affected by such circumstances or causes uses commercially reasonable efforts to mitigate the effect of such delay. Either party may terminate this Agreement upon written notice if such circumstances or causes delay any party's performance under this Agreement by a period of more than thirty (30) days.

18.4 Assignment. This Agreement will be binding upon and inure to the benefit of the parties hereto and their permitted successors and assigns. Notwithstanding the foregoing, neither this Agreement, nor any rights or obligations hereunder, may be assigned or otherwise transferred by either party without the prior written consent of the other party, provided, however, that either party may assign, without prior written consent all or any of its rights or delegate all or any of its obligations under this Agreement to a majority owned subsidiary of such party or to a third party in connection with merger or the sale of all or substantially all of the assets or business to which this Agreement relates. Any other attempted assignment or transfer without prior written consent will be voidable at the option of the non-consenting party.

18.5 Subcontractors. Customer acknowledges that in performing the Services Open-Silicon may use Subcontractors to design, manufacture and/or ship Products without Customer's prior approval; provided that Open-Silicon shall remain fully responsible and liable for the performance of the Services and its other obligations under this Agreement, and any act or omission of Open-Silicon's Subcontractors (other than Subcontractors designated by Customer in writing) shall constitute an act or omission of Open-Silicon, and any act or omission by an such Subcontractors (other than Subcontractors designated by Customer in writing) that would constitute a breach of the terms and conditions of this Agreement if it were an act or omission by Open-Silicon shall constitute a breach of this Agreement by Open-Silicon. Notwithstanding the foregoing, in the event that the SOW identifies a specific Subcontractor to perform certain functions hereunder or requires that the Subcontractor for certain functions will be mutually agreed upon by the parties, Open-Silicon may not use another Subcontractor to perform such functions without obtaining Customer's prior written approval therefor.

18.6 Counterparts. This Agreement may be executed in multiple counterparts, each of which will be deemed to be an original and all of which will be deemed a single agreement.

18.7 Construction. The headings provided in this Agreement are for convenience only and shall not be used in interpreting or construing this Agreement. For purposes of this Agreement, the term, "including" means "including but not limited to".

18.8 Independent Contractors. The parties hereto are independent contractors. Nothing in this Agreement will be construed to make the parties partners or joint venture or to make either party liable for the obligations, acts, or activities of the other.

18.9 Third Party Rights. The provisions of this Agreement are intended solely for the benefit of Customer and Open-Silicon, and shall create no rights or obligations enforceable by any other party. Notwithstanding the foregoing, to the extent that a third party is licensed hereunder, such third party is a beneficiary of the provisions hereof that related to such licensed rights.

18.10 Rights and Remedies Cumulative. Except as provided in Section 10 (“Limited Product Warranty; Disclaimer”), the parties’ rights and remedies under this Agreement are cumulative. Each party acknowledges and agrees that an actual or threatened breach of any of the provisions contained in this Agreement may result in immediate, irreparable and continuing damage to the non-breaching party for which there may be no adequate remedy at law, and the non-breaching party may apply to any court of competent jurisdiction for specific performance or injunctive relief to enforce or prevent any breach of the provisions of this Agreement.

18.11 Severability; Limitations Period. If any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason, then such provision will be enforced to the maximum extent permissible under the circumstances so as to effect the intent of the parties and the economic effect of the Agreement. Neither the legality, validity or enforceability of the remaining provisions hereof nor the legality, validity, or enforceability of the provision at issue in other circumstances will otherwise be affected or impaired thereby, and the remainder of the provisions of this Agreement will remain in full force and effect. The parties will replace any unenforceable provision with a valid, legal and enforceable provision that most early achieves the economic effect of the unenforceable provision. Without limiting the generality of the foregoing, the parties agree that Section 11 (“Limitation of Liability”) will remain in effect notwithstanding the illegality, invalidity, unenforceability, or failure of the essential purpose of any provision in Section 10 (“Limited Product Warranty; Disclaimer”).

18.12 Entire Agreement. This Agreement, including the exhibits hereto and each SOW, contains the entire understanding between Customer and Open-Silicon with respect to the subject matter hereof and merges and supersedes all prior and contemporaneous agreements, dealings and negotiations. Any modification, alteration, or amendment to this Agreement will not be effective unless made in writing, dated and signed by duly authorized representatives of both parties. All rights and remedies, whether conferred hereunder, or by operation of law, will be cumulative and may be exercised singularly or concurrently. Failure by either party to enforce a term will not be deemed a waiver of future enforcement of that or any other term. The following Exhibits are hereby incorporated herein by this reference: **Exhibit A** (“Statement of Work”), **Exhibit B-1** (“Prototype Approval Form”), **Exhibit B-2** (“Release to Production Form”), **Exhibit C** (“Engineering Change Order Process”), **Exhibit D** (“Milestone Acknowledgement Letter”), and **Exhibit E** (“Die Banking”). In the event of a conflict between the terms of this Agreement and any exhibit, the terms of this Agreement will govern. In the event of a conflict between **Exhibit A** and a change order executed by parties, the change order will govern.

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to enter into this Agreement, effective as of the Effective Date.

OPEN-SILICON, INC.
("OPEN-SILICON")

By: /s/ Howard Freedland

Print Name: Howard Freedland

Title: Director, Legal Affairs

Date: 8/11/10

NETLIST, INC.
("CUSTOMER")

By: /s/ Gail Sasaki

Print Name: Gail Sasaki

Title: VP and Chief Financial Officer

Date: 8/11/10

Exhibit A



490 N McCarthy Blvd. Suite 220,
Milpitas, CA 95035

STATEMENT OF WORK
Netlist Inc
August 10, 2010

PROJECT: [*] ASICs**
[*]**
DESIGN, PROTOTYPE DELIVERY & PRODUCTION

This Statement of Work (“SOW”) is entered into as Exhibit A to the Open-Silicon Inc. ASIC Design and Production Agreement (the “Agreement”) and is attached thereto and incorporated therein; and in the event the Agreement is not executed, the initial draft of the Agreement is attached hereto and incorporated herein and shall serve to govern the terms and conditions of the relationship until such time (if at all) such Agreement is executed. This document dated August 10, 2010, between Open-Silicon, Inc. (“Open-Silicon”) and Netlist Inc., (“Customer”), is for the ASIC project(s) commonly referred to by Customer as [***], and commonly referred to by Open-Silicon as [***] and [***] *respectively* (the “Project”).

This SOW defines the project scope for the above mentioned Project. This document describes the Project details, activities, deliverables, milestones, assumptions, and pricing for the Project.

This document represents the complete set of services and deliverables provided by Open-Silicon. Services and deliverables [***] will [***] without [***] by [***] and may be [***].

The obligations of Open-Silicon and Customer under this Agreement are completely independent of any obligations existing under any other agreement between Open-Silicon and Customer, with the exception of the Agreement noted above.

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1. DEFINITION OF TERMS

The terms used herein are defined as follows:

- “ **will define** ”: party will provide technical data, requirements or specifications to enable the other party to fulfill project tasks and deliverables.
- “ **will confirm** ”: party to positively affirm technical data, requirements or specifications proposed by other party to fulfill project tasks and deliverables. Except where noted in the Agreement, affirmation may be given through email or through other digital authorization methods.
- “ **will acquire** ” or “ **will obtain** ”: party will obtain for the purposes of fulfilling project tasks and deliverables [***].
- “ **will perform** ”: party will complete as part of project tasks, with [***] defined.
- “ **will manufacture** ”: party will manufacture, or arrange to manufacture, materials for the purposes of fulfilling project tasks and deliverables, with [***] defined.
- “ **will present for review** ”: party will deliver for the sole purpose of review by the other party. In this case, material may be presented on supplier premises [***]. In any case, the materials presented for review remain the property of [***] or [***].
- “ **will consult** ”: party will provide [***] guidance for the purpose of assisting the other party to complete project tasks and deliverables. Party [***] as a result of such guidance.
- “ **will sign off** ”: party will acknowledge acceptance of deliverable and the technical data contained within, confirming the data meets the goals of the project. Except where noted in the Agreement, acknowledgement may be given through email or through other digital authorization methods.
- “ **will provide** ” or “ **will deliver** ”: party will provide to the other party as a project deliverable. This may include reports, IP, manufactured articles or material goods. Ownership of intellectual property underlying all project deliverables is not defined in this document. Ownership and usage rights of intellectual property and material goods generated by [***] are defined in the Agreement. Ownership and usage rights of intellectual property generated by [***] are defined in [***] or equivalent document provided by [***].

2. PROJECT SCOPE

Open-Silicon is contracted to provide a quantity of tested packaged prototype devices to Customer for the [***] (Netlist Document 309-0001-42) and [***] (Netlist Document 309-0002-42) designs. Working from [***] and [***], Open-Silicon will [***] and [***] for release to an [***] at a [***], prepare [***] and [***], and design and fabricate [***] for the sample units. Following Customer approval of the prototype devices, [***], and [***], Open-Silicon will provide production silicon in accordance with Customer purchase orders, as further described in the Agreement.

2.1 PRODUCT PROPOSAL

The information provided in this section is subject to [***]. Some [***] may be [***]. [***] reserves the right to [***] below due to changes in [***]. Changes should be [***] by ECO, and may impact the [***] noted in this document.

2.1.1 ASIC Overview

Project Name	[***] (Customer)
	[***] (Open-Silicon)
Description	[***]
[***]	[***]
[***]	[***]
	NOTE: Final die size to be determined at [***], based on [***] and [***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

Project Name	[***] (Customer)
	[***] (Open-Silicon)
Description	[***]
[***]	[***]
[***]	[***]
	NOTE: Final die size to be determined at [***], based on [***] and [***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

2.1.2 Memory Types

2.1.2.1 (Insert additional rows as needed)

Module	Type	No. of Instances	Depth	Width	Frequency	Total Bits
[***]						

2.1.3 I/O Types

(Insert additional rows as needed)

Type	Oxide Thickness	I/O Power Supply	Required?
[***]		[***]	[***]
[***]		[***]	[***]
[***]		[***]	[***]
[***]		[***]	[***]
[***]	[***]	[***]	[***]
[***]		[***]	[***]
[***]		[***]	[***]

2.1.4 Foundry Setup

2.1.4.1

Foundry	***	Process	***
Special Layers	***	Total Layer Count	***
Special Devices	***	Supply Voltage	***
***	***	Special Steps	***
***	***	Other Options	***

*Yield must follow the *** used by *** to predict production *** otherwise *** will be adjusted.

2.1.5 IP List

2.1.5.1 IP Provided by ***

*** will provide the following ***, subject to *** in *** of the Agreement.

Product No.	Name of IP	Vendor	Datasheet provided (version or date)	Views Provided	Oxide Requirement	Maintenance and Support from vendor
***	***	***		***	***	***
***	***	***		***	***	***
***	***	***		***	***	***
				***		***
				***		***
				***		***

2.1.5.2 IP Notes

- All IP is characterized for the process technology described in section 2.1.4.
- Unless otherwise stated, all IP includes *** provided by *** and *** starting on the date on which *** was received.
- For the package of IP of provided by ***, the *** can be ***. There is *** to *** for the following products: ***
- Open-Silicon recommends that *** is *** until the silicon is ***. Extension of *** is possible with the *** commencing on the ***.
- IP support includes ***, as necessary, with *** and *** and ***.
- The order for the IP as per the provided datasheet will be placed upon receipt of the PO. The applicable views will be delivered to the Customer within *** unless otherwise stated in the table above. For *** will work with *** in order to determine the delivery schedule.
- *** are not included for *** and can be provided ***.
- For *** noted in the table above, *** may initiate work with a *** using *** (if applicable). Over the course of development for ***, the *** will provide specifications and deliverables, providing detail in addition to the specifications noted in this SOW. *** is responsible for reviewing and signing off on such interim deliverables, up to and including ***. *** will facilitate the reviews for these deliverables. *** acknowledges that *** during this process. *** that *** relative to the *** should be *** through an ECO addendum to this SOW.

2.1.5.3 IP Provided by Customer

Name of IP	Vendor	Views Provided	Oxide Requirement
***	***	***	***
***	***	***	***
***	***	***	***

- [***] is responsible for all the IP support and arrangement of all the integration reviews and sign-offs from [***] for the [***]. This should include at least one [***] review during the Explore Phase, and a final review during the Implement Phase to sign-off on the [***].
- [***] to specify the process options and the metal layers required for each IP
- [***] to provide the [***] and the [***] used to qualify each IP
- [***] to provide the integration requirements for each IP
- [***] to provide the FAB requirements of oxide level for each IP

2.1.5.4 Limitations in IP Usage

- IP as [***] is for [***] and [***] unless otherwise stated.

2.1.6 TEST and DFT

2.1.6.1 Test Hardware Summary

Test Type	Y/N	Estimated Test Time Target	Tester Type
***	***	***	***
***	***	***	***
***	***	***	***

Test Hardware	Y/N	Number of units	Number of sites
***	***	***	***
***	***	***	***
***	***	***	***

2.1.6.2 Subsystem Test Summary

Type	Subsystem	Test Structure Planned	Tests Initiated by	Test Stimulus	% of chip
***	***			***	
***	***	***	***	***	***
***	***	***	***	***	***
***	***			***	
***	***	***	***	***	
***	***	***	***	***	

2.1.6.3 DFT Structures — [***] Provided

Vendor/Description:	Inserted at:	Inserted by:	Testbench provided?	Test Logic Verified by:
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***

Note: [***] to provide [***] to [***].

2.1.6.4 DFT Structures — [***] Provided

Vendor:	Type	Inserted at:	Inserted by:	Testbench provided?	Test Logic Verified by:

2.1.6.5 Functional Test Patterns — [***] Provided

<u>Subsystem Targeted</u>	<u>Description</u>	<u>IO qty used</u>	<u>Approx Duration (ns)</u>	<u>Max Freq (MHz)</u>	<u>No. of vectors</u>
[***]	[***]				

2.1.6.6 Test List — Full Packaged Test

1	[***]
2	[***]
3	[***]
4	[***]
5	[***]
6	[***]
7	[***]
8	[***]
9	[***]
10	[***]

*If partial scan is implemented then test coverage may be lower than desired. [***] may need to provide [***] to meet [***] since [***] had expected to [***]. Note that there is no [***] included in this SOW for [***].

2.1.6.7 Test Effort

The SOW assumes [***] and [***] on the [***] for the purpose of [***] and [***]. The SOW also assumes [***] of effort on-tester and [***] of effort off-tester on the [***] for the purpose of [***] and [***]. [***] test will be performed at [***] or a [***].

2.1.7 Design

2.1.7.1 Design Features Summary

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

[***] agrees that design efforts will [***], but will [***] at [***] and the [***] will need to be [***]. If [***] is necessitated due to [***] related to [***] between the analyze, explore, and implement drops there will be [***].

2.1.7.2 Design Tool and Signoff Responsibility

	<u>Implemented By</u>	<u>Signoff Responsibility</u>	<u>Signoff Tool</u>
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

*If a [***] cannot be provided, [***] will need to [***].

2.1.8 Packaging

2.1.8.1 Packaging Summary

The NRE includes a [***]. Device assembly will be performed at [***] or [***].

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

2.1.8.2 Special Package Treatment Options

[***] may select special treatment options for [***]. Some items may involve [***]. If these options are [***], [***] will [***] that attempt to [***] listed elsewhere in this document.

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

2.1.8.3 Package Extraction Options

[***] may select extraction options for package design. [***] these items entail [***], which is [***].

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

2.1.8.4 [***] will make [***] design available to [***] so that [***] can [***] package models.

2.1.9 [*] anticipates the need to create some reasonably small number [***] in order to facilitate [***] on this design. While not [***] in this agreement, [***] agrees that it will [***] for the design and implementation [***] as will be determined to be necessary to [***].**

2.1.10 Product Qualification

Product qualification is [***], with [***] defined in section [***]. In addition, the [***] will need [***] the quantity of [***] required for this task.

2.1.10.1 Product Qualification Test List

TEST		# UNITS	# LOTS	CONDITIONS	METHOD	ATE READ PTS
DEVICE QUAL						
1	[***]	[***]	[***]	[***]	[***]	[***]
2	[***]	[***]	[***]	[***]	[***]	[***]
3	[***]	[***]	[***]	[***]	[***]	[***]
4	[***]	[***]	[***]	[***]	[***]	[***]
5	[***]	[***]	[***]	[***]	[***]	[***]
5	[***]	[***]	[***]	[***]	[***]	[***]
PACKAGE QUAL						
1	[***]	[***]	[***]	[***]	[***]	[***]
2	[***]	[***]	[***]	[***]	[***]	[***]
3	[***]	[***]	[***]	[***]	[***]	[***]
4	[***]	[***]	[***]	[***]	[***]	[***]
5.1	[***]	[***]	[***]	[***]	[***]	[***]
5.2	[***]	[***]	[***]	[***]	[***]	[***]
5.3	[***]	[***]	[***]	[***]	[***]	[***]

NOTES:

- For [***], [***] will test each [***] separately for [***] samples. One would need at total of [***] for a device with [***] power groups for each of the [***] tests.
- [***] Test conditions of [***] should be used as [***] for the [***] and not a [***].
- [***] — Maximum [***]
- [***] is selected based on estimated [***] of the part at [***], at a [***] of [***].
- [***] will be done on [***] or [***] units only.
- [***] will done on [***] units from each of [***] the [***] test to look for possible [***].
- [***] is not recommended for [***]. [***] is the recommended [***] and is required for [***] instead of [***].
- [***] of the [***] test will be preformed, [***], is required, [***]. [***] recommends [***] for [***] & [***] for [***]. Must be run at [***]. If the part [***] during the [***] is greater than [***], [***] is recommended.
- [***] units will be used as part of all [***].
- [***] would follow the latest JDEC recommended [***] and [***] latest specification, at the time the qualification process starts.
- The [***] will be submitted to the customer and needs to be approved before we can start ordering the qualification hardware.
- [***] will be performed using [***]. Quantity of [***] with [***] will be designed and manufactured. The [***] will be done in series unless additional [***] are ordered by the customer.
- All of the [***] may be done in parallel if we [***] as [***] separate assembly lots [***].

2.1.10.2 Product Qualification Hardware

Qualification will be performed using [***] for this purpose. Quantity of [***] with [***] will be designed and manufactured.

2.1.10.3 Product Qualification Environmental Stress Test [***]

ENVIRONMENTAL STRESS			
TEST	SAMPLE SIZE/LOT	LOTS	CONDITIONS
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

2.1.11 Product Characterization

Product characterization is [***]. In addition, [***] will need to [***] and [***] the [***] for this task.

2.1.11.1 [***]

	Test	Pattern Used	New Vector for Char?	Vectors Provided
1	[***]	[***]	[***]	[***]
2				
3				
4				

2.1.11.2 Device Characterization Parameters

	Units	CONDITIONS
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

2.1.11.3 Device Characterization Hardware

Characterization will be performed using [***] for this purpose. Quantity of [***] will be [***] and [***]. The tester specified in section 2.1.6.1 will be used for all characterization tests.

2.1.11.4 [***] Characterization Support

This SOW [***] characterization work by [***].

2.1.11.5 Split Lot Inventory

Split lots will be held in a wafer bank for [***] after first prototypes are delivered. In the event the customer wishes to hold these split lots in a wafer bank beyond this time, [***] will be required. This will provide for wafer bank support for an additional [***] period. Should the customer wish to have split lot engineering samples assembled and tested after the initial [***] period has expired, a minimum lot charge of [***] will apply.

3. PROJECT TASKS AND DELIVERABLES

3.1 FOUNDRY AND DESIGN SETUP

3.1.1 [***]

[***] will confirm:

3.1.1.1 Description of foundry process in section 2.1.4 of this document

3.1.2 [***]

[***] will [***] if necessary :

- 3.1.2.1 [***] from the foundry
- 3.1.2.2 Foundry [***]
- 3.1.2.3 [***] for the process
- 3.1.2.4 Version information for [***]
- 3.1.2.5 Foundry process-specific [***] and [***]

3.2 IP

3.2.1 [***]

[***] will confirm:

3.2.1.1 IP listed in section 2.1.5 of this document is the complete & correct list.

[***] will define:

3.2.1.2 Full list of IP required in project which is specified in section 2.1.5, with version and options required. [***] is responsible for selecting the proper IP to meet the functional specifications of the product.

3.2.1.3 Required delivery date for all IP views from [***], allowing [***] for delivery of [***] after PO is issued by the Customer. The schedule for [***] will need to match deliver schedule to ensure project schedule and costs objectives are met. [***] will provide timely feedback of issues regarding IP.

[***] will provide:

3.2.1.4 [***] of all IP not provided by [***], as noted in section 2.1.5 of this document

3.2.1.5 Licensing paperwork for all IP not provided by [***]

3.2.1.6 [***] guidelines [***] for [***] not provided by [***].

[***] will signoff:

3.2.1.7 *Design Collaterals List* presented by [***]

3.2.2 [***]

[***] will provide:

3.2.2.1 Where available, datasheets of IP listed in section 2.1.5, within [***] of receipt of Customer PO.

3.2.2.2 [***] of all [***] IP listed, within [***] of receipt of Customer PO. The schedule for the [***] IP will be provided by that [***]

[***] will present for review:

3.2.2.3 *Design Collaterals List*, containing IP with associated revision numbers.

3.3 TEST

3.3.1 [***]

[***] will confirm:

3.3.1.1 Test list defined in section 2.1.6.6 of this document. Test list should be defined to fit within the [***] defined in section 2.1.6.1. [***] reserves the right to modify [***] and [***] based on actual [***] achieved.

[***] will provide:

3.3.1.2 Document detailing all [***] and [***] provided by [***] as noted in section 2.1.6.4 of this document.

3.3.1.3 Document detailing test requirements for [***] in the design, including electrical requirements for [***] and procedures for [***]

3.3.1.4 Document detailing test requirements for any [***] or [***], including electrical requirements for [***] and procedures for [***].

3.3.1.5 Document detailing all [***] not provided by [***], as noted in section 2.1.6.5.

3.3.1.6 [***] as defined in section 2.1.6.5. All patterns will adhere to [***]; repeated [***] releases from [***] may be performed at [***].

[*] will define:**

- 3.3.1.7 Any special requirements for [***]
- 3.3.1.8 List of active signals used for [***]

[*] will perform:**

- 3.3.1.9 [***] for all [***] provided by [***] to [***], ensuring correct operation. Simulation should use [***] with [***] information provided by [***].
- 3.3.1.10 [***] using [***] validation hardware to correlate [***] run by [***] on prototype parts.

[*] will sign-off:**

- 3.3.1.11 [***] presented by [***].
- 3.3.1.12 Netlist and schematics for [***] and [***], presented by [***]

3.3.2 [*]**

[*] will perform:**

- 3.3.2.1 [***] for [***] provided tests specifically noted in section 2.1.6.
- 3.3.2.2 [***] conversion of a complete set of [***] provided by [***], limited to the tests specifically noted in section 2.1.6.5
- 3.3.2.3 Simulation of [***] on [***] with [***] information
- 3.3.2.4 Additional conversion and simulation of [***] provided by [***], in the event of [***] or added tests. This is provided [***].
- 3.3.2.5 Design and layout of [***], as defined in section 2.1.6.1.
- 3.3.2.6 Design and layout of [***], as defined in section 2.1.6.1.

[*] will deliver:**

- 3.3.2.7 [***] Test Plan for the device.

[*] will present for review:**

- 3.3.2.8 Netlist and schematics of [***].
- 3.3.2.9 Netlist and schematics of [***].

[*] will manufacture or obtain:**

- 3.3.2.10 [***], with specification and quantities as defined in section 2.1.6.1.
- 3.3.2.11 [***] for [***], with specification and quantities as defined in section 2.1.6.1.
- 3.3.2.12 [***] for packaged test on the specified [***].

3.4 DFT STRUCTURES

3.4.1 DFT Flow

1. [***] delivers [***] to [***]
2. [***] inserts DFT [***] structures, creates Test-benches [***]
3. [***] verifies that the DFT [***] passes on the Test-benches
 - 3b) [***] does trial synthesis on the [***] and verifies [***] Functionality for DFT simulations
 - 3c) [***] verifies [***] simulation device functionality of [***].
4. [***] provides this data set, including all Test-benches and run scripts as a verified package [***]
5. [***] makes further functional changes as necessary, [***].
 - 5b) [***] re-runs the [***] on the [***] prior to delivery to [***]
6. [***] works with [***] on trial synthesis of the [***] with functional changes from step 5.
7. [***] re-runs the netlist [***] against the Testbenches, confirms DFT functionality.
8. If there are any [***], [***] iterates the [***] with Customer until all [***] is clean
9. [***] proceeds to Physical design using the netlist.

3.4.2 [***]

[***] will confirm:

3.4.2.1 [***] of the [***] and [***] in section 2.1.6 of this document

[***] will define:

3.4.2.2 [***] to be used as [***] for [***].

3.4.2.3 [***] to be used as [***] for testing [***].

3.4.2.4 [***] commands, aside from commands to enable DFT structures specifically implemented by [***].

[***] will perform:

3.4.2.5 [***] design in a manner conducive to [***] targets

3.4.2.6 Simulation of [***] provided by [***] defined in section 2.1.6.3. [***] will ensure correct functional operation at [***] before delivering the updated version of [***].

3.4.2.7 Hookup of [***] provided by [***] for [***] defined instructions in section 2.1.6.3. [***] will ensure correct functional operation [***].

3.4.2.8 [***] and [***] of [***] defined in section 2.1.6.4. [***] will ensure correct functional operation [***] and [***].

[***] will provide:

3.4.2.9 Documentation of chip DFT structures employed at [***] level, including those provided by [***].

3.4.2.10 Documentation of [***], if different from [***]

3.4.2.11 A [***] for [***] to generate [***] and for [***] and [***].

3.4.3 [***]

[***] will perform:

3.4.3.1 [***] insertion of [***] and [***], and multiplex logic for [***] on the [***] deliverable

3.4.3.2 [***] of [***] on the [***] deliverable

3.4.3.3 [***] and [***] of [***] listed in section 2.1.6.3

3.4.3.4 Creation of [***] to enable test mode for [***], if noted in section 2.1.6.2

[***] will provide:

3.4.3.5 [***] based on the [***] with [***] and [***].

3.4.3.6 [***] and [***] listed in section 2.1.6.3.

3.4.3.7 [***] to enable [***] for [***], if noted in section 2.1.6.2

3.5 DESIGN EVALUATION (ANALYZE PHASE)

3.5.1 [***]

Will complete the following deliverables prior to starting the “Analyze” phase

[***] will provide:

3.5.1.1 [***] for the purpose of design evaluation

3.5.1.2 Initial [***] covering [***]

3.5.1.3 [***] per Design Hand-Off Requirements Document (HRD)

3.5.1.4 [***] per *HRD*

3.5.1.5 [***] and [***] for [***] per HRD

3.5.1.6 Initial [***] file for [***] per HRD

- 3.5.1.7 [***] requirements per *HRD*
- 3.5.1.8 [***] guidance per *HRD*
- 3.5.1.9 [***] will provide a [***] that is a good representation of the functional operation of the [***]. [***] are to be provided in [***] format. This will be used as input to [***] tools used by [***].
- 3.5.1.10 Specific [***] requirements per *HRD*

[*] will perform:**

- 3.5.1.11 Functional simulations necessary to justify core switching assumptions used in [***] performed by [***]
- 3.5.1.12 Any simulations necessary to justify [***] for [***] recommended by [***]

3.5.2 [*]**

[*] will perform:**

- 3.5.2.1 Synthesis of the [***]
- 3.5.2.2 Evaluation and feasibility analysis of [***] in section 2.1.
- 3.5.2.3 Initial Quality-of-Results (QoR) Evaluation of [***] for [***] using [***] analysis
- 3.5.2.4 Initial QoR Evaluation of [***] file for [***], and provide feedback to [***]
- 3.5.2.5 Trial [***] with [***] for geometries [***] or if elected in section 2.1.6.2 [***]
- 3.5.2.6 Simulation-based [***] using [***] or [***], [***]
- 3.5.2.7 [***] based on [***] data
- 3.5.2.8 [***] structuring & [***] estimation
- 3.5.2.9 [***] structuring and [***] estimation

[*] will consult on:**

- 3.5.2.10 [***] by spreadsheet analysis using [***] and [***] for [***].
- 3.5.2.11 [***] allocation for [***], based on [***] assumptions
- 3.5.2.12 [***] for [***] and [***] based on [***] specifications.
- 3.5.2.13 [***] design modifications for improving [***] and [***]

[*] will provide:**

- 3.5.2.14 Assessment of the [***] specification: [***], and [***].
- 3.5.2.15 Validation of [***] & [***] proposal
- 3.5.2.16 Requirements for Explore Phase.

3.6 TRIAL DESIGN EXECUTION (EXPLORE PHASE)

3.6.1 [*]**

Will complete the following deliverables prior to starting the “Explore” phase

[*] will perform:**

- 3.6.1.1 [***] design including [***] structures per section 2.1.6.4. [***] design should include [***] and considered to be [***] verified to within [***].
- 3.6.1.2 Cleanup of [***] constraints based on [***] reports provided by [***]

[*] will provide:**

- 3.6.1.3 [***] for the design that when [***] by [***] with the [***] adheres to the guidelines provided by [***] with checks per *HRD*. This [***] should not differ from the [***] by more than [***] on any of the following metrics: [***]
- 3.6.1.4 Complete [***] constraints covering [***] per *HRD*
- 3.6.1.5 Final [***] file for [***] per *HRD* . Subsequent to this release, [***] should not change.

[*] will review:**

3.6.1.6 At the end of the Explore Phase, [***] will review the [***] results and ensure [***].

[*] will confirm:**

3.6.1.7 At the end of the Explore Phase, [***] will take [***] generated by [***] and validate that against their functional test bench using [***] and [***] simulation.

3.6.2 [*]**

[*] will perform:**

Trial activities on [***], complete *HRD* , complete [***], final [***] to include

3.6.2.1 Design [***] checks per *HRD*

3.6.2.2 [***] checking, [***]

3.6.2.3 QoR checks for [***] acceptance [***]

3.6.2.4 QoR checks for [***] acceptance [***]

3.6.2.5 [***] with [***] for geometries [***] or [***] in section 2.1.6.2 [***].

3.6.2.6 [***] and [***] based on [***] input data

3.6.2.7 [***] and [***] analysis

3.6.2.8 [***]

3.6.2.9 [***]

3.6.2.10 [***] place and route [***] or [***]

3.6.2.11 [***]

3.6.2.12 [***] analysis with [***] analysis; [***] will be identified [***].

3.6.2.13 Formal Verification of [***]

3.6.2.14 Physical Verification of [***]; errors will be identified [***].

[*] will provide:**

3.6.2.15 [***] including [***]. The design may [***].

3.6.2.16 [***] information in [***] or [***] format.

3.6.2.17 [***] analysis reports

3.6.2.18 Summary from [***] analysis and [***] design rule check

3.6.2.19 [***] will provide [***] for [***] and [***].

3.7 FINAL DESIGN EXECUTION (IMPLEMENT PHASE)

3.7.1 [*]**

Will complete the following deliverables prior to starting the “Implement” phase

[*] will perform:**

3.7.1.1 Final [***] and [***]. Design is [***] and considered to be [***], as only [***] are permitted beyond this point.

[*] will provide:**

3.7.1.2 Final [***] for the design that when [***] by [***] with the [***] adheres to guidelines provided by [***] with checks per *HRD*. This [***] should not differ from the Explore Phase [***] by more than [***] on any of the following metrics: [***].

3.7.1.3 Complete and debugged (final) [***] covering [***] per *HRD*

[*] will confirm:**

3.7.1.4 At the end of the Implement Phase, [***] will take [***] generated by [***] and verify & validate their functional test bench using [***] simulations

3.7.1.5 At the end of the Implement Phase, [***] will verify the [***] analysis results and confirm correctness

3.7.2 [***]

[***] will perform:

Physical activities on [***] to include

- 3.7.2.1 [***] synthesis with [***] per HRD
- 3.7.2.2 [***] checking, [***]
- 3.7.2.3 QoR checks for [***] acceptance [***]
- 3.7.2.4 QoR checks for [***] acceptance [***]
- 3.7.2.5 [***] with [***] for geometries [***] or [***] in section 2.1.6.2 [***]
- 3.7.2.6 [***] and [***] based on Explore review.
- 3.7.2.7 [***] and [***] analysis
- 3.7.2.8 [***]
- 3.7.2.9 [***]
- 3.7.2.10 [***] place and route
- 3.7.2.11 [***] optimization
- 3.7.2.12 [***] fixes
- 3.7.2.13 [***]
- 3.7.2.14 [***]
- 3.7.2.15 Formal Verification of [***]
- 3.7.2.16 [***] analysis with [***] analysis
- 3.7.2.17 Physical Verification of database: [***]

[***] will provide:

- 3.7.2.18 [***] including [***], to within a margin to be determined by [***]. [***] fixes remain to be done in the Converge phase.
- 3.7.2.19 [***] information in [***] format
- 3.7.2.20 Summary from [***] analysis and [***] check.
- 3.7.2.21 [***] analysis reports with [***].
- 3.7.2.22 [***] and [***] description.

3.8 FINAL DESIGN EXECUTION (CONVERGE PHASE)

Incremental [***], with an option for [***] on the [***] generated at the end of the implement phase with no more than [***] or a [***] change that requires no more than [***] of effort.

3.8.1 [***]

[***] will provide:

- 3.8.1.1 Optionally, [***] on the [***] generated at the end of the implement phase with no more than [***] additions. It is difficult to predict [***] but typically they run [***] in section 7.2.1.1.

[***] will signoff:

- 3.8.1.2 At the end of the Converge Phase, the customer will take [***] generated by Open Silicon including all [***] and verify functionality with their functional test bench using [***] simulations
- 3.8.1.3 At the end of the Converge Phase, customer will approve and signoff on the [***] analysis results.

3.8.2 [***]

[***] will perform:

- 3.8.2.1 Incremental [***] modification with [***]
- 3.8.2.2 Incremental [***] optimization [***] and final [***]
- 3.8.2.3 [***]

- 3.8.2.4 Final [***] and [***] fix.
- 3.8.2.5 [***].
- 3.8.2.6 Formal Verification of the [***]
- 3.8.2.7 [***] analysis with [***]
- 3.8.2.8 Physical Verification of database: [***]
- 3.8.2.9 Additional functional [***] on a [***]. [***] will be that of Design Engineering (individual specialist) [***].

[*] will provide:**

- 3.8.2.10 [***] including [***].
- 3.8.2.11 [***] information in [***] format
- 3.8.2.12 [***] analysis reports with [***].

3.9 TAPE-OUT AND RELEASE TO MASK-MASKING

3.9.1 [***]

[*] will sign-off:**

- 3.9.1.1 [***] for release-to-mask-making
- 3.9.1.2 [***] Analysis results for release-to-mask-making

3.9.2 [***]

[*] will perform:**

- 3.9.2.1 Final physical verification of database: [***]
- 3.9.2.2 [***] analysis with [***] analysis
- 3.9.2.3 Final [***] and [***] check
- 3.9.2.4 Preparation of [***] forms
- 3.9.2.5 [***] to foundry
- 3.9.2.6 Approval of [***] to initiate mask making

[*] will provide:**

- 3.9.2.7 [***] including [***] and [***], with [***] and [***].
- 3.9.2.8 [***] information in [***] format
- 3.9.2.9 [***] analysis reports with [***].
- 3.9.2.10 Final [***] Scripts.
- 3.9.2.11 Reports/logfiles from [***] verification

3.10 PACKAGING

3.10.1 [***]

[*] will provide:**

- 3.10.1.1 Package requirements based on templates provided by [***]
- 3.10.1.2 Initial package [***], including complete [***] for package.
- 3.10.1.3 Final [***] following final approval in physical design.
- 3.10.1.4 [***] guidance for [***].
- 3.10.1.5 Updated [***] estimates based on physical design evaluation.

[*] will sign-off:**

- 3.10.1.6 Package selection performed by [***]
- 3.10.1.7 [***] and [***] assignment from [***]
- 3.10.1.8 Package design information, including [***] provided by [***].
- 3.10.1.9 [***] diagram presented by [***]
- 3.10.1.10 [***] drawing presented by [***].

3.10.2 [***]

[***] will perform:

[***] will design the package.

- 3.10.2.1 Package selection analysis for [***] proposal, to include: [***].
- 3.10.2.2 Additional package selection analysis [***]
- 3.10.2.3 [***] and [***] for package.
- 3.10.2.4 [***] and [***] design.
- 3.10.2.5 [***] of layout/routing of package netlist.
- 3.10.2.6 [***] of layout/routing of package netlist [***]

[***] will provide:

- 3.10.2.7 Details of selected package, to include: [***].
- 3.10.2.8 Outline drawing of selected package.
- 3.10.2.9 [***] for package
- 3.10.2.10 Package netlist
- 3.10.2.11 [***] of package design defined in section 2.1.8.

[***] will present for review:

- 3.10.2.12 [***].
- 3.10.2.13 Package netlist

[***] will manufacture or obtain:

- 3.10.2.14 [***] kit for package.
- 3.10.2.15 Prototype package [***]
- 3.10.2.16 Shipping Trays

3.11 PROTOTYPE OPERATIONS

3.11.1 [***]

[***] will define:

- 3.11.1.1 [***] requirements for [***] lot fabrication
- 3.11.1.2 Test requirements for [***] testing of early samples

[***] will perform:

- 3.11.1.3 [***] on the prototype units
- 3.11.1.4 [***] on sample parts run through the production screen.
- 3.11.1.5 Approval of final *Production Test Plan* within [***] of release by [***].
- 3.11.1.6 Completion of *Release to Production Form* within [***] of first samples being available, or if design is [***], a written notice of [***]. If this step is [***] turnaround time on [***] requests for prototype or production activities.

3.11.2 [***]

[***] Will Perform:

- 3.11.2.1 Bring-up and debug of [***] test
- 3.11.2.2 Bring-up and debug of [***] program [***].
- 3.11.2.3 [***] test program
- 3.11.2.4 [***] screens on a sample quantity using the [***] test program.

[*] Will Provide:**

- 3.11.2.5 [***] prototype parts [***].
- 3.11.2.6 [***] prototype parts [***].
- 3.11.2.7 [***] prototypes
- 3.11.2.8 Final Production Test Plan

3.12 PRODUCT QUALIFICATION [*]**

Product qualification is [***], and is [***].

3.12.1 [*]**

[*] Will Confirm:**

- 3.12.1.1 [***] parameters and [***] per section 2.1.10
- 3.12.1.2 [***] functionality is acceptable to begin qualification based on [***] test and [***].

3.12.2 [*]**

[*] will Perform:**

- 3.12.2.1 Design of [***] for qualification as specified in section 2.1.10.2
- 3.12.2.2 Conversion of [***] tests for the purpose of [***].
- 3.12.2.3 Bring up and debug of [***] for qualification.
- 3.12.2.4 [***] qualification per test plan listed in section 2.1.10
- 3.12.2.5 [***] qualification report.

[*] will Manufacture:**

- 3.12.2.6 [***] for qualification as specified in section 2.1.10.2

[*] will Provide:**

- 3.12.2.7 [***] Report

3.13 PRODUCT CHARACTERIZATION [*]**

Product characterization is [***].

3.13.1 [*]**

[*] Will Confirm:**

- 3.13.1.1 [***] parameters and [***] per section 2.1.11
- 3.13.1.2 [***] functionality is acceptable to begin characterization based on [***] test and [***].

[*] Will Sign-off:**

- 3.13.1.3 [***] for characterization meets [***], and is shown to be stable and effective through [***] with [***].

3.13.2 [*]**

[*] will Perform:**

- 3.13.2.1 Design of [***] for characterization as specified in section 2.1.11.3, if necessary
- 3.13.2.2 Conversion of [***] tests for the purposes of [***]
- 3.13.2.3 [***] tests for the purposes of characterization, if specified in section 2.1.11.1
- 3.13.2.4 Bringup and debug of [***] for characterization
- 3.13.2.5 [***] characterization per test plan listed in section 2.1.11.1, using [***] defined in section 2.1.11.2.
- 3.13.2.6 [***] and generation of [***].

***** will Manufacture:**

3.13.2.7 *** for qualification as specified in section 2.1.11.3.

***** will Provide:**

3.13.2.8 *** Characterization Report

3.13.2.9 *** for selected tests to be selected by ***.

4. ASSUMPTIONS

- 4.1.1.1 All Customer deliverables are complete, correct, and pass all acceptance checks as laid out by Open-Silicon through their checklists. Open-Silicon will provide copies of checklists at kick-off.
- 4.1.1.2 All *** are ***. Open-Silicon is *** to create or modify any ***. Open Silicon will notify Customer in case they are notified of any error in one of these mentioned ***, as reported *** in the deliverables.
- 4.1.1.3 All Customer ***, do not *** any ***.
- 4.1.1.4 All Customer deliverables are completed in a timely manner according to the timeline defined in this document and do not cause a delay in any phase of development work. Such a delay should be communicated through the defined Engineering Change Order Process ***.
- 4.1.1.5 All intellectual property provided to *** by ***, including ***, is to be used **. The intellectual property is not to be used *** described in this SOW, whether for **. This limitation includes *** and *** implementations.
- 4.1.1.6 *** will ensure that all IP chosen for this product meets the needs of the product design and allows for proper functionality at **.
- 4.1.1.7 *** is responsible for the correct functional operation of the end-product, including design integration of all IP **. *** will perform all necessary simulations and checks to ensure that the device, as designed, will perform the function intended for the product. This includes **. *** will provide *** to *** for signoff. Additionally *** may elect to perform spice simulations for additional verification confidence
- 4.1.1.8 *** will be responsible for all freight charges and duties incurred.
- 4.1.1.9 Open-Silicon *** responsible for any RMA ***.
- 4.1.1.10 All Customer deliverables, including *** and *** specifications, do not materially change through the course of the project. Any such change should be discussed and approved through the defined Engineering Change Order Process, and may *** and **. Examples of such changes include:
- Significant modifications to the *** relative to the **. The *** should deviate no more than *** on any of the following metrics:***.
 - Re-synthesis or large number *** of ***, or a *** that requires more *** of effort or any *** subsequent to the start of the implement phase defined in the program milestones.
 - Changes to any product specification listed in Section 2.1 of this document subsequent to SOW signing and program kickoff.
 - Material changes to any specification in the Hand-off Requirements Document subsequent to the review and signoff of said document.
- 4.1.1.11 Design goals are *** in the selected technology based on *** assessment.
- 4.1.1.12 *** is not responsible for any ***. *** will support *** simulation through the *** and ***.
- 4.1.1.13 *** simulation are the primary *** tools. All *** are to be assessed by **. Any *** are the responsibility of ***.
- 4.1.1.14 *** will be implemented across the entire design. *** implementation will need to be treated as ***.
- 4.1.1.15 The only true physical hierarchy is the *** in the *** from a process point this is a standalone entity (i.e. not a region). Only *** will be used for the remainder of the physical design activities on the ***
- 4.1.1.16 All *** are available in a timely manner from the ***.
- 4.1.1.17 *** will re-characterize *** at *** corners.

5. WORK CONSIDERATIONS

5.1 WORKING CONDITIONS

Open-Silicon and the Customer make the following provisions for the project:

- 5.1.1.1 Access to secure Open-Silicon FTP site will be provided for data transfer during the project.
- 5.1.1.2 Customer and Open-Silicon will identify a single point-of-contact to coordinate meetings, present status and coordinate work. The contact at Open-Silicon will be [***].
- 5.1.1.3 Open-Silicon will provide [***] that will be [***] for the Project.
- 5.1.1.4 Customer and Open-Silicon employees may occasionally be unavailable due to internal situations such as training, time-off, staff meetings, etc. Both parties will provide timely notice of unavailability, and advance provision should be made to ensure this doesn't affect schedule.
- 5.1.1.5 Open-Silicon will provide [***] for program review meetings, and ad-hoc meetings with the [***] and [***] on an as-needed basis.
- 5.1.1.6 [***] is responsible for the purchase of all licenses used at the [***] facility. [***] is responsible for the purchase of all licenses used at the [***] facility.
- 5.1.1.7 For any work done at Customer facilities, appropriate accommodations at Customer's site, including [***] will be provided.
- 5.1.1.8 For any work done at Open-Silicon facilities, appropriate accommodations at Open-Silicon site, including [***] will be provided.
- 5.1.1.9 The primary location of Open-Silicon design implementation engineers for this program will be at [***] facility. Operations resources primary location is at Open-Silicon [***].
- 5.1.1.10 Open-Silicon will provide its employees and subcontractors the necessary workstation hardware (CPUs, monitors, memory and disk storage) and design tool licenses at its facilities and will be responsible for System Management on those systems and licenses.
- 5.1.1.11 With written permission from Customer, Open-Silicon reserves the right to share sections/whole of the design with [***] that are unique to the design. In doing so, Open-Silicon will ensure protection of Customer's design IP through NDA, wherever needed.

5.2 STAFFING

Open-Silicon will staff the Project with [***] from [***] as well as [***] from [***] to perform all Open-Silicon [***] tasks detailed in this document. Additional staff will be maintained to perform all Open-Silicon [***] tasks detailed herein. In addition, Open-Silicon will support the Customer team on [***] activities as defined in the Project tasks.

Sufficient resources will be maintained to ensure that the Project schedule and milestones set forth in this document are met. Open-Silicon has [***], provided there is no [***] on Project schedule or Open-Silicon deliverables.

If the Project is delayed due solely to a delay of more than [***] in Customer deliverables or a delay [***], Open-Silicon may [***] or at Netlist discretion [***].

At [***], Open-Silicon will identify the members of the ASIC design team assigned to this program. If for any reason, Open-Silicon must replace or substitute a team member, Netlist will be notified and will have the right to accept the newly designated ASIC design team member. Netlist will provide their approval or disapproval of the newly designated ASIC design team member within [***] of notification.

Open-Silicon agrees that it shall not make any changes to [***] without the prior written approval of Customer.

5.3 PROJECT MANAGEMENT

Open-Silicon will designate [***] for the duration of the project. [***] will be responsible for project management during [***], after which [***] will take over these responsibilities.

The project managers for this Project are:

<u>For Open-Silicon:</u>		<u>For Customer:</u>	
NAME:	[***]	NAME:	[***]
EMAIL:	[***]	MAIL:	[***]
PHONE:	[***]	PHONE:	[***]

The Design Manager for this Project are:

NAME:	[***]
EMAIL:	[***]
PHONE:	[***]

6. PROJECT SCHEDULE

The Project timeline is detailed below, including initiation requirements for each phase. Phase definitions are provided in the following section.

6.1 MILESTONE SUMMARY

The following milestone summary is based on the assumptions stated herein and is dependent on [***] per the plan outlined in the SOW. A [***] for this project will be published at completion of the [***].

6.1.1 Estimated Milestones

<u>Task Description</u>	<u>Duration (calendar weeks)</u>
Kick-off	[***]
Setup Phase	[***]
Analyze Phase	[***]
Explore Phase (Trial Phys Design Trial)	[***]
Implement Phase (Final Phys Design Final)	[***]
Converge Phase (Customer ECO/Final Timing fixes)	[***]
Tapeout Phase(Final LVS/DRC & Design Review)	[***]
Package Design & Fabrication (in parallel with Design & Fab tasks)	[***]
Data Fracture / Mask making	[***]
Wafer Fabrication + Bumping*	[***]
Assembly	[***]
Test (Partially tested)	[***]
Test (Fully tested)	[***]
Blind Built Parts (From kickoff to untested prototypes shipped)	[***]
Initial Testing (From kickoff to partially tested prototypes shipped)	[***]
Fully Tested Parts (From kickoff to fully tested prototypes shipped)	[***]

Note: This plan assumes an Analyze Phase start by [***], and a Design Trial Start (Explore Phase readiness) no later than [***]. A delay in Explore phase start due to [***] or [***] will require [***]. Additional time dedicated by the physical design team will be [***] defined in section 7.2.1.1.

* Wafer Fabrication can potentially be expedited by [***].

IP Delivery Schedule Requirements:

[***]

Index of Project Deliverables:

Deliverable Description	SOW Section reference (if provided during development)	Designation for Escrow (if not provided during development)
***	***	***
***	***	***
***	***	
***	***	
***	***	***
***	***	***
***	***	
***	***	***
***	***	
***	***	***
***	***	***
***	***	
***	***	
***	***	
***	***	
***	***	
***	***	***
***	***	***
***	***	***
***	***	***

6.2 ENTRY / INITIATION REQUIREMENTS

Should this plan be extended due to [***], [***] reserves the right to [***] to the schedule.

6.2.1 Design Setup Phase: [*]**

6.2.1.1 Contract & SOW signed and full PO received from Customer

6.2.2 Analyze Phase: [*]**

- 6.2.2.1 Design Hand-off Requirements Document & Checklist reviewed with Customer and minimum dataset identified for Analyze Phase
- 6.2.2.2 Availability of [***] including all [***].
- 6.2.2.3 Availability of preliminary [***] covering all modes

6.2.3 Explore Phase: [*]**

- 6.2.3.1 Design Hand-off Requirements completed [***] and HRD document finalized
- 6.2.3.2 Signoff of Analyze checklist, marking completion of [***] checks
- 6.2.3.3 Availability of [***], with all [***] structures complete
- 6.2.3.4 Availability of [***], which covers [***]
- 6.2.3.5 [***] signed off

6.2.4 Implement Phase: [*]**

- 6.2.4.1 Completion of Explore Phase Checklist & Sign-Off Review
- 6.2.4.2 [***] & [***]
- 6.2.4.3 Functional [***] necessary to enable all [***] listed in section 5.2.2.

6.2.5 Converge Phase: [*]**

- 6.2.5.1 Completion of Implement Phase Checklist & Sign-Off Review
- 6.2.5.2 Only [***] before the start of this phase [***] and no changes to the [***]

6.2.6 Tape-Out Phase: [*]**

6.2.6.1 Completion of Tape-Out Phase Checklist & Sign-Off Review

6.2.7 Job-View and Maskmaking: [*]**

6.2.7.1 Tapeout / transfer of [***] by [***]

6.2.7.2 Approval of job view by [***]

6.2.8 Test Preparation Phase:

6.2.8.1 Complete requirements for [***] test

6.2.8.2 [***] for all [***] tests, following [***] guidelines for [***] generation.

6.2.8.3 [***] and [***] to enable [***] simulation of [***]

6.2.9 Package Evaluation Phase:

6.2.9.1 Completed package requirements spreadsheet (template to be provided by [***])

6.2.9.2 Completed [***] spreadsheet (template to be provided by [***])

6.2.9.3 System guidelines for [***]

6.2.9.4 [***] design rules for [***] committed.

6.2.10 Package Design and Fabrication Phase:

6.2.10.1 Completed package evaluation phase

6.2.10.2 Final [***] from layout.

6.2.11 Fabrication:

6.2.11.1 Approval of [***] at [***]

6.2.11.2 Mask making.

6.2.12 Assembly:

6.2.12.1 Completed package design and fabrication phase.

6.2.12.2 Completed fabrication (FAB-out)

6.2.13 Blind Built Prototype Parts:

6.2.13.1 Completed assembly

6.2.14 Basic Testing:

6.2.14.1 Completed assembly

6.2.14.2 Completed Test Preparation Phase

6.2.15 Fully Tested Parts:

6.2.15.1 Completed assembly

6.2.15.2 Completed Test Preparation Phase & Basic Testing

6.2.16 Product Qualification and Characterization:

6.2.16.1 Completed assembly

6.2.16.2 Completed full testing

7. NRE PRICING AND PAYMENT SCHEDULE

7.1 PROJECT COST

A complete PO for all the items in section 7.1.1 is required at the time of Project start, but individual amounts for each item will be invoiced as specified in the "Invoice Schedule" column of Section 7.1.1 and will be due [***] following date of invoice. All amounts are specified in US Dollars, unless otherwise specified.

All costs listed below are based on the assumptions and specifications noted in this document.

7.1.1 NRE

(Ref: QM# qm_10_4_Netlist_ID_7_12_10.xlsm & qm_10_4_Netlist_RD_7_12_10.xlsm)

Description	Cost	Invoice Milestone/Deliverable
Total Combined NRE [***]	[***]	—
#1	[***]	Design Kickoff Meeting
#2	[***]	Tapeout
#3	[***]	Prototype Wafer Fab Completion
#4	[***]	Later of June 15, 2011 or Prototype Wafer Fab Completion plus 3 months
#5	[***]	Prototype Wafer Fab Completion plus 7 months

NRE NOTES :

Items in the NRE pricing [***] beyond [***] of [***].

7.1.2 Note on IP Charges:

7.1.2.1 Customer is [***] the IP procured for the Project, [***], but subject to [***] approval.

7.1.2.2 NRE [***] IP support, for [***].

7.1.3 Note on Manufacturing Charges:

7.1.3.1 NRE [***] and [***] and [***] for test development based on the test list defined in this document. Changes to the [***] or [***] may affect the [***]. Open-Silicon shall [***], [***] for the tester. Open-Silicon will provide [***] per [***] at [***]. Customer understands that the test program development & debug is [***] and [***] requirements.

7.1.3.2 Customer is [***] material procured [***] for the Project and subject to Customer's [***].

7.1.3.3 Unless stated otherwise, [***]. All prototype units would be [***] below.

7.1.4 Note on Design Charges

7.1.4.1 Open-Silicon shall [***] for [***] described in this SOW. This includes [***], and [***] Customer deliverables. Open-Silicon will communicate the charge for any such services before commencing work and will not commence such work without Customer's prior written approval.

7.1.4.2 The DNRE assumes that there will only be [***] for the Explore Phase. The [***], which should include all the incremental feedback provided by the Open-Silicon design team. For the Implement Phase, there will [***] at the beginning of this phase, and there will [***] at the beginning of the Converge Phase, which must be created from the final Implement Phase Netlist with [***] ONLY.

7.1.5 Minimum Order Quantity

	Engineering Lot	Production Lot
Minimum Wafer Quantity	[***]	[***]
Minimum Build Quantity	[***]	[***]
Minimum Shipment Quantity	[***]	[***]

7.1.6 Minimum Lot Charges

7.1.6.1 For all lots/services where the total cost of the lot/service is less than [***], then a [***] of [***] will be applied

7.1.7 Note on Engineering Lot

7.1.7.1 [***] engineering lot [***] included in the NRE per device. Included in the NRE Open Silicon will package a quantity of [***]. Packaging of additional prototype devices can be ordered (see pricing in engineering lot table below).

7.1.7.2 [***] is [***] yielding from the engineering lot, and is required to [***] within [***] of tape-out.

7.1.7.3 [***] is [***] material [***] for the Project and subject to [***].

7.1.7.4 Engineering lot unit pricing is based on [***] and [***] actual product yields. [***] by Customer [***] and testing of initial parts. The engineering lot summary is shown in the table below. Final die size [***] and engineering lot [***].

7.1.7.5 Customer may procure engineering lot devices throughout the life of this program.

Engineering Lot Summary (Ref: QM#)

Total number of wafers started [***]	[***]
Estimated Net Packaged Parts	[***]
Additional Prototype Packaging and Test Price	[***]
	[***]
Total number of wafers started [***]	[***]
Estimated Net Packaged Parts	[***]
Additional Prototype Packaging and Test Price	[***]

7.1.8 Characterization and Qualification

7.1.8.1 The cost for device characterization and device and package qualification are specified below. These amounts are [***] in Table 7.1.1. The amount below for device characterization will be invoiced at the completion of device characterization and the amount below for device and package qualification will be invoiced at the completion of device and package qualification.

Item	Cost	Notes
Device Characterization [***]	[***]	Per section 2.1.11
Device and Package Qualification	[***]	Per section 2.1.10.1
Total Characterization and Qualification	[***]	

7.2 PROJECT OPTIONS

7.2.1 Optional Development Costs (T&M)

The following costs may apply for additional services beyond those explicitly described in this document.

7.2.1.1 Time and Materials

Design Engineering (individual specialist)	[***]
IP Consulting	[***]
Packaging Engineering	[***]
Test Engineering	[***]
Tester Time — production ATE	[***]
Tester Time — characterization	[***]

7.2.2 Optional Services and Materials

Item	Cost	Notes
***	***	***
***	***	***
***	***	
***	***	***

8. PRODUCTION COST ESTIMATE

8.1.1.1 Volume Production Part Price

(Ref: QM# qm_10_4_Netlist_***.xslm & qm_10_4_Netlist_***.xslm)

Volume	Part Price			
	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***

Note on Part Price:

- Part price is based on the information included in this SOW *** and ***. The part pricing *** from the information contained in this SOW *** and *** as well as other component ***.
- The volume production part pricing and the engineering part pricing *** design specs.
- This volume production part pricing *** the Customer releases the prototypes to production *** the initial prototypes.
- *** royalties for *** IP.

9. TERMS AND CONDITIONS

The following terms and conditions are set and defined in the Agreement.

- Change Resolution Process
- Terms for production parts
- IP transfer between parties
- IP ownership
- Termination and Renewal
- Warranty
- Indemnity
- Limitation of Liability
- Assignment

Open-Silicon, Inc.:

By: _____ [***]

Name: _____ [***]

Title: _____ [***]

Date: _____ [***]

Netlist, Inc.:

By: _____ [***]

Name: _____ [***]

Title: _____ [***]

Date: _____ [***]

10. REVISION HISTORY

SOW Rev	Revised by	Date	Comments
1.0	***	***	***
2.0	***	***	***
3.0	***	***	***

**OPEN-SILICON, INC.
PROTOTYPE APPROVAL**

**Customer:
Address:**

**Customer Agreement Number/Date
(incorporated by reference):**

**Customer Part Number:
Project Code Name:**

We have completed our evaluation of the prototypes for the above-referenced part. The part meets our requirements, and the part complies with the test vectors to which we mutually agreed.

We formally approve the prototypes for the above-referenced part.

Approval:
ACKNOWLEDGED AND AGREED:
(Print or Type Customer Name)

By: _____
(Signature)

Print Name: _____

Title: _____

Date:

**OPEN-SILICON, INC.
RELEASE TO PRODUCTION**

**Customer:
Address:**

**Customer Agreement Number/Date
(incorporated by reference):**

**Customer Part Number:
Project Code Name:**

We formally request that the part be released to production.

Approval:
ACKNOWLEDGED AND AGREED:
(Print or Type Customer Name)

By: _____
(Signature)

Print Name: _____

Title: _____

Date:

EXHIBIT C

OPEN-SILICON, INC. ENGINEERING CHANGE ORDER PROCESS

PURPOSE

To describe method to be used in accepting Engineering Change Orders from Customers

SCOPE

This procedure applies to all designs that are in active execution phase.

PROCESS OWNER

The process is owned by the ASIC Program Manager (APM). The release and any subsequent changes to this procedure must have the approvals of the Director of APM and Engineering.

APPLICABLE / REFERENCE DOCUMENTS

1.1 OS-0027, List of Customer ECOs

DEFINITIONS

Customer: That with whom a Statement of Work has been signed.
Project: Work to be performed by Open-Silicon for such a customer

GENERAL POLICY PROCEDURE

ECO Description

Scope of work to be performed by Open-Silicon is dictated by the Statement of Work document signed between Open-Silicon representative and Customer. Any change to this scope of work which could result in change in effort and cost shall be deemed as an Engineering Change Order (ECO) from the customer. Such additional tasks shall only be undertaken by Open-Silicon after customer has submitted a signed ECO Form provided by Open-Silicon.

ECO Types

ECOs can be filed for a variety of reasons. Some of the most common reasons for filing an ECO are listed below:

- Customer may want to change the scope of work being performed. For example, a customer may decide to retain Open-Silicon to undertake Part Qualification which may not be included in the current SOW.
- Customer may decide to change the package of the device.
- Customer may have a need to change the IP being used in the design.
- Customer may want to move out the schedule due to their internal project delays.
- Customer may want to change the architecture of their device. This includes changes to device interfaces
- Customer may want to change the design center and/or design team working on the design

ECO parameters

All ECOs must be measurable. The ECO form shall have the following measurable parameters (among other parameters):

- Number of lines of code changed
- Number of gates modified
- Number of nets touched
- Number of memory elements (including registers) impacted
- Levels of Netlist hierarchy traversed for the ECO
- Time to implement changes

- Cost in dollars to implement and verify
- Impact to schedule to implement
- List of IPs whose performance/characterization could be impacted
- Die size impact to implement
- Impact to package size and performance
- Expected design performance impact to implement
- ECO approval

ECO Forms shall be approved by Engineering and APM office for execution. APM shall update schedule based on ECO impact and publish new date as POR to all.

Standard ECO Form

Project Name: _____
Dated: _____
ECO Number: _____

ECO Description

Table 1: Type of ECO

Type	Description	Items Impacted
Change in scope of work		{SOW, Ts&Cs, Cost, etc.}
Change in design center		{Schedule, Cost, etc.}
Change in design team		{Schedule, Cost, etc.}
Change in design schedule		{Schedule, Cost, etc.}
Change in IP agreements		{SOW, Schedule, Cost, Ts&Cs, etc.}
Change in design architecture		{SOW, Schedule, Cost, etc.}
Change in package		{SOW, Schedule, Cost, etc.}

Table 2: Design Change Details

Object	Details	Items Impacted
Additional Tasks being requested		{Characterization, Qual, SHL, etc.}
Lines of Code modified		{rtl, tests, test-benches, scripts etc.}
Gates modified/added/removed		{netlists, modules, verification scripts, etc.}
Nets touched		{netlists, modules, verification scripts, etc.}
Memory Elements (including registers) modified/added/removed		{netlists, modules, verification scripts, etc.}
Levels of netlist hierarchy traversed		{netlists, modules, verification scripts, etc.}
IPs whose performance/characterization could be impacted		{instance names, modes in which impact is observed, netlist}
Design performance impact		{timing, area, power, IR drop, EM etc.}

Table 3: Design ECO related Tasks

Task	Owner	Completed	Comments
Modified RTL Functionally Verified RTL to Netlist Formally Verified			
Modified design checked for performance deviation			
Verified impact of modified design on IP			
Verified impact of modified design on die size			
Verified impact of modified design on package			

Table 4: Cost of ECO

Function	Cost	Comments
Man Days required to Implement the ECO		
Monetary Impact to existing agreement		
Schedule Impact		

This ECO is being approved for execution by the following representatives of Open-Silicon and its Customer:

OPEN-SILICON, INC.
("OPEN-SILICON")

("CUSTOMER")

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

EXHIBIT D

MILESTONE ACKNOWLEDGEMENT LETTER

[[CUSTOMER LETTERHEAD]]

Chief Financial Officer
Open-Silicon, Inc.
490 N. McCarthy Blvd., Suite 220
Milpitas, CA 95035

Dear Sir or Madam:

We acknowledge completion of milestone XX and all prior milestones.

Sincerely,

/s/ _____

Officer of Customer

Exhibit E
(“ Die Banking ”)

Open-Silicon will build and hold Product in a die bank for Customer under the following additional terms and conditions:

1. Open-Silicon will hold Products in a die bank in a quantity equal to the greater of (a) the then-current Forecast, and (b) the cumulative volume of wafers ordered that are produced into Production Units in the preceding three (3) months.
2. Customer will pay Open-Silicon for wafers to be held in die bank (but not delivered to Customer), and for the completion of production of die bank wafers (for delivery to Customer) according to the table set forth below:

Per wafer deposited to die bank	Per Production Unit from die banked wafer
1/2 of part price as specified in SOW or any subsequent amendment that modifies the part price stated therein times the number of expected yielded parts from such deposited wafers	1/2 of part price as specified in SOW or any subsequent amendment that modifies the part price stated therein; when all die banked wafers from a deposit have been built out and shipped, any difference between the amounts invoiced and the value of the part price times Production Units shipped shall be either invoiced, or (if the invoices are in excess of such value) refunded.

3. Open-Silicon will invoice Customer for die banked material at the time such material is deposited into die bank, and for the completion of production of die bank wafers at the same time that Production Units would be invoiced under the Agreement.
4. Subject to Section 5 below, [***] acknowledges and agrees that [***] is stored [***] and is [***] and [***], without [***], whether [***], including but not limited to the [***] arising from a course of [***].
5. After completion, Production Units made from die banked material are not treated differently under the Agreement.
6. No material shall remain in die bank longer than [***] without the parties' express agreement. In the event that the parties make such agreement, Customer acknowledges that [***] and extended warranty [***].
7. Die bank inventory shall be handled on [***] basis, and to facilitate this Open-Silicon may complete production of any and all wafers in die bank to fulfill any Purchase Order for Production Units and deposit any and all newly-fabricated wafers in die bank.
8. Purchase Orders specifically for die bank material [***].

CERTIFICATION

I, Chun K. Hong, certify that:

1. I have reviewed this Amendment No.2 to Quarterly Report on Form 10-Q of Netlist, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: August 24, 2011

/s/ Chun K. Hong

Chun K. Hong

President, Chief Executive Officer and Chairman of the Board

CERTIFICATION

I, Gail M. Sasaki, certify that:

1. I have reviewed this Amendment No.2 to Quarterly Report on Form 10-Q of Netlist, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: August 24, 2011

/s/ Gail M. Sasaki

Gail M. Sasaki

Vice President and Chief Financial Officer
