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DEFENSE LOGISTICS AGENCY

LAND AND MARITIME POST OFFICE BOX 3990 COLUMBUS, OH 43218-3990

Mrs. Nancy Shindler Director of Quality Teledyne e2v HIRel Electronics 765 Sycamore Drive Milpitas, CA 95035 January 23, 2024

Dear Mrs. Shindler:

Re: Notification of Qualification, Hybrid Microcircuits, MIL-PRF-38534, FSC 5962, VO(VOH-24-038373), CN# 086140

Qualification of your materials and processes done at Teledyne e2V plant in Lewisburg, TN is granted effective the date of this letter, under the current issue of the Performance Specification MIL-PRF-38534, Hybrid Microcircuits, FSC 5962. This action is a result of successful qualification in accordance with Test Report # 38534-6620-23.

The materials and processes qualified by this report are identified in your Hybrid Product Baseline (VQH-42H) and VQH-23-037743 (CN# 082919), for qualification device type 2296270-5, 2296270-8, 2296275-2 and 2296275-5.

To maintain this listing, you are required to provide a retention report every twelve months. For additional information regarding the retention of qualification report, see the DLA Land and Maritime VQH published booklet <u>Certification and Qualification Procedures for MIL-PRF-38534 Hybrid and MCM Microcircuits.</u>

QML manufacturers shall notify the qualifying activity immediately after learning of a potential issuance of a GIDEP alert, problem advisory or major quality/reliability problem affecting QML products. Failure to provide prior notification may be grounds for removal from QML 38534.

Because we are held responsible for the accuracy and currency of this QML, please let us know if your company discontinues production using these materials or processes.

If you have any questions concerning this letter, please contact Mr. Francois Ndiaye, 614-692-5061 or E-Mail: francois.ndiaye@dla.mil.

Sincerely,

ROBERT M. HEBER Chief Sourcing and Qualifications Division Sourcing and Qualification Division, Hybrid Devices Branch, DLA Land and Maritime-VQH

DLA Land and Maritime

MIL-PRF-38534 QML Program Status

Teledyne e2V Hirel Electronics (CAGE Code: 0C7V7)

1425 Higgs Road, Lewisburg, TN 37091, US

Company Contact: Ms. Nancy Shindler, Phone: 408-585-7172, Fax: 408-736-8708, E-mail: Nancy.Shindler@teledyne.com

DLA Contact: Mr. Francois Ndiaye, Phone: 614-692-5061, Fax: 614-692-6942, E-mail: vqh.fn@dla.mil

Quality Management (QM) Program: Non-TRB

Periodic Inspection System: Option 1

Technologies: Semiconductor Dual High Performance Op Amp

Teledyne e2V HIREL - TN (Lewisburg)

Qualification Letters: VQ(VQH-20-035131), VQ(VQH-24-038373)

Class Level Information: See Note 6/

Class H, Class E

Substrate Fabrication Information: See Note 1/

Substrate Fabrication Flows: N/A

Substrate Fabrication: Purchased Thin Film on Alumina, 3 Conductor Level(s), Resistors

Assembly Information: See Note 1/

Assembly Flows: 00-SB15-016 revision C **Substrate Attach:** Non-Conductive Epoxy

Element Attach: Conductive Epoxy, Nonconductive Epoxy, Eutectic

Add-on Elements: Unpackaged Die, Daughter Board, Chip Capacitors, Tabs

Wire Bonding: Gold, Aluminum, Ribbon

Package Information: See Notes 1/ 2/ 3/

Package Information: Metal Package Package, Flatpack, Seam Seal, 2.58 Inch Seal Perimeter, 14 Leads, Gold Lead Finish

Notes:

^{1/} The QML listing can be expanded provided appropriate qualification testing is performed and passed. Therefore the manufacturer may accept an order for compliant product not covered by his QML listing, but shall not ship the compliant product until the testing has been successfully completed.

^{2/} Package seal perimeter is listed by largest perimeter successfully tested in inches.

^{3/} Package lead counts are listed by maximum number of leads covered by qualification.

^{4/} Caution. Do not use this number for item acquisition. Item acquired to this number may not satisfy the performance requirements of the listed SMD.

^{5/} Inactive for new design, no longer available from manufacturer.

^{6/} Class E devices are devices, which meet all of the requirements of one of the other classes (K, H, or G), with some exceptions taken. Therefore any manufacturer qualified to G, H or K is eligible to produce and mark product as compliant to class E.

CONDITIONS REGARDING QUALIFICATION APPROVAL

- 1. A listing on the Qualified Manufacturers List (QML) does not guarantee acceptance of the product(s) in any future purchase.
- 2. QML listing does not constitute a waiver of any requirements of the specification or of the provisions of any contract.
- 3. Advertising of qualification information is permitted. Permission to use such information for advertising or publicity purposes is granted provided that such publicity or advertising does not state or imply that the product(s) is the only product of that type qualified or that the Department of Defense in any way recommends or endorses the manufacturer's product.
- 4. The listing applies only to products produced in the plant(s) specified in this letter of notification of qualification and applies to future amendments or revisions of the specification, unless otherwise notified.
- 5. The qualifying activity must be advised in advance of any change to the materials and manufacturing construction techniques. Failure to notify the qualifying activity of any change to the materials and manufacturing construction techniques is cause for removal from the QML.
- 6. Continued qualification listing is dependent upon the manufacturer's compliance with the retention of qualification, verification of qualification, to which his products are qualified.