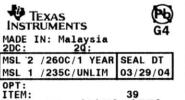
| DC N Num | 2023 | 230522003.1 | | | DC | PCN Date: M | | May 24, 2023 | | | |
|---|-------------|-------------|--------------------------------|--|------------------------------|-----------------------|------------------|---------------------------------|---|-----------------|--------------------|
| | | | | | | , , , | | | | | |
| Title: Qualification of CFAB and DFAB8 as additional Fab sites for Select LBC4 Devices | | | | | | | | | | | |
| Customer Contact: | | P | <u> IN IV</u> | <u>lanager</u> | | Dept: | 0 0 11 | acto | Quai | ity Services | |
| Proposed 1 st Ship Date: | | | | Aug 24, 2023 | | | accepted | Sample requests accepted until: | | Jun 24, 2023* | |
| - | | s recei | ved a | a fte | r Jun 24, 2 | 023 w | II not be su | ıppo | rted. | | |
| Change Ty | | | | _ | | | | | | | |
| | bly Site | | | Assembly Process | | | | | | | Materials |
| □ Design □ Test S | | | | ☐ Electrical Specificat ☐ Packing/Shipping/L | | | | | | I Specification | |
| | Bump S | ito | | H | | | | Test Process | | | |
| | Fab Site | | | ☐ Wafer Bump Material ☐ Wafer Fab Materials | | | | H | Wafer Bump Process Wafer Fab Process | | |
| Water | T ab Site | | | $\frac{\square}{\square}$ | Part number | | | | _ Water Fab Process | | |
| | | | <u>i_</u> | <u> </u> | | l Deta | | | | | |
| Description | n of Ch | ange: | | | PCN | Deta | 113 | | | | |
| | | | Fah s | itac | (CEAR & DE | Δ R Q \ | sing qualifie | d Dro |)CASS - | Techn | ology for the list |
| | | | | | ection below | | oning quantities | u 1 10 | JC C33 | reciiii | ology for the list |
| Current F | | | Fa | Fab Site | | Additiona | | I Fab site | | | |
| Curren | t Fab | _ | | Wafer | | r | Addition | nal | 1 | | Wafer |
| Sit | Site Proces | | cess | 5 | Diamet | er | Fab sit | e | Pro | cess | Diameter |
| | Site | | | | Diamet | . | | | | | |
| DL-LIN LBG | | IB | CA | | 150mm | | CFAB | | LBC4 | | 200mm |
| | | CŦ | ,4 13011111 | | | DL-LIN | | LBC4 | | 20011111 | |
| Qual details are provided in the Qual Data Section. Reason for Change: These changes are part of our multiyear plan to transition products from our 150-millimeter | | | | | | | | | | | |
| | | | | | nanufacturin nd supply co | | | chno | logies, | unde | rscoring our |
| Anticipate | d impa | ct on F | orm, | Fit, | Function, | Qualit | y or Reliab | ility | (posi | tive / | negative): |
| None | | | | | | | | | | | |
| Impact or | Enviro | nment | al Ra | ating | gs | | | | | | |
| Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings. | | | | | | | | | | | |
| RoHS | | _ | REACH | | | Green Status | | | IEC 62474 | | |
| No Change | | ⊠ N | ☑ No Change | | No Change | | ☑ No Change | | | | |
| Changes to product identification resulting from this PCN: | | | | | | | | | | | |
| Fab Site Information: | | | | | | | | | | | |
| Chip Site | | (| Chip Site Origin Code (20L) | | Chi | nip Site Country Code | | ode (2 | | | |
| DL-LIN | | | DLN | | USA | | | Dallas | | | |
| CFAB | | | | CU3 | | CHN | | | Chengdu | | |
| | | | | | | | | | | | |

Sample product shipping label (not actual product label)



LBL: 5A (L)TO:1750



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483\$I2 (P) (2P) REV: (V) 8033317 (20L) CSO: SHE (21L) CCO: USA (22L) ASO: MLA (23L) ACO: MYS

| Product Affected: | | | | | | | |
|-------------------|---------------|--------------|--------------|--|--|--|--|
| UCC2897APW | UCC2897APWR | UCC2897ARGPR | UCC2897ARGPT | | | | |
| UCC2897APW/1 | UCC2897APWR/1 | | | | | | |

For alternate parts with similar or improved performance, please visit the product page on II.com



TI Information Selective Disclosure

Qualification Results Data Displayed as: Number of lots / Total sample size / Total failed

| Туре | Test Name / Condition | Duration | Qual Device: SN65HVDA1040AQDRQ1 | |
|------|-----------------------------------|--------------------------|------------------------------------|--|
| HAST | Biased HAST, 130C/85%RH | 96 Hours | 3/231/0 | |
| AC | Autoclave 121C | 96 Hours | 3/231/0 | |
| TC | Temperature Cycle, -65/150C | 500 Cycles | 3/231/0 | |
| HTSL | High Temp Storage Bake 150C | 1000 Hours | 3/135/0 | |
| HTOL | Life Test, 125C | 1000 Hours | 3/231/0 | |
| ELFR | Early Life Failure Rate, 125C | 48 Hours | 3/2400/0 | |
| HBM | ESD - HBM | 4000 V | 1/3/0 | |
| HBM | ESD - HBM (Pin 5) | 10000 V | 1/3/0 | |
| НВМ | ESD - HBM (Pin 6 & 7) | 12000 V | 1/3/0 | |
| CDM | ESD - CDM | 1500 V | 1/3/0 | |
| LU | Latch-up | (per JESD78) | 1/6/0 | |
| ED | Electrical Distributions | Per Datasheet parameters | 3/90/0 | |

- QBS: Qual by Similarity
- Qual Device SN65HVDA1040AQDRQ1 qualified at LEVEL1-260C

A1 (PC): Preconditioning:

Performed for THB, Biased HAST, AC, uHAST, TC & PTC samples, as applicable.

Ambient Operating Temperature by Automotive Grade Level:

Grade 0 (or E): -40°C to +150°C Grade 1 (or Q): -40°C to +125°C Grade 2 (or T): -40°C to +105°C Grade 3 (or I): -40°C to +85°C

E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):

Room/Hot/Cold: HTOL, ED

Room/Hot: THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU

Room: AC/uHAST

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

TI Qualification ID: 20170424-121679



TI Information Selective Disclosure

Qualification Results Data Displayed as: Number of lots / Total sample size / Total failed

| Туре | Test Name / Condition | Duration | Qual Device: UCC2897APWR | QBS Process Reference: TLC5970RHPR | QBS Package Reference: TPS53123PW | QBS Package Reference: SN74LVT574PW |
|------|-----------------------------|-----------------------------|-----------------------------|--|---|---|
| HTOL | Life Test, 125C | 1000 Hours | - | 3/231/0 | - | |
| HTSL | High Temp Storage Bake 170C | 420 Hours | - | 3/231/0 | - | 3/231/0 |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | 3/231/0 | - | 3/231/0 |
| AC | Autoclave 121C | 96 Hours | - | 3/231/0 | 3/231/0 | 3/231/0 |
| TC | Temperature Cycle, -65/150C | 500 Cycles | - | 3/231/0 | 3/231/0 | 3/231/0 |
| HBM | ESD - HBM | 2500 V | 1/3/0 | - | - | - |
| HBM | ESD - HBM | 2000 V | | 3/9/0 | | |
| CDM | ESD - CDM | 1500 V | 1/3/0 | - | - | - |
| CDM | ESD - CDM | 500 V | - | 3/9/0 | - | - |
| LU | Latch-up | (per JESD78) | 1/3/0 | 3/18/0 | - | - |
| ED | Electrical Characterization | Per Datasheet Parameters | 1/30/0 | 1/30/0 | - | - |
| MQ | Assembly MQ | Per Site Specifications | Pass | Pass | Pass | Pass |

- QBS: Qual By Similarity
- Qual Device UCC2897APWR is qualified at LEVEL1-260C
- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- $The following are equivalent \, HTSL \, options \, based \, on \, an \, activation \, energy \, of \, 0.7eV: \, 150C/1k \, Hours, \, and \, 170C/420 \, Hours \, description \, and \, 170C/420 \, Hours \, description \, descripti$
- The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: http://www.ti.com/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

TI Qualification ID: R-CHG-2302-053

For questions regarding this notice, e-mails can be sent to the contact below or your local Field Sales Representative.

| Location | E-Mail | | | | |
|---------------------------|--------------------------------|--|--|--|--|
| WW Change Management Team | PCN www admin_team@list.ti.com | | | | |

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF

MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale (www.ti.com/legal/termsofsale.html) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.