

| | | | |
|---|--|---------------------------------------|----------------------------------|
| PCN Number: | 20210407002.1 | PCN Date: | Apr 8, 2021 |
| Title: | Qualification of DMOS6 as additional Fab Site option for select LBC9 devices | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services |
| Proposed 1st Ship Date: | Jul 8, 2021 | Estimated Sample Availability: | Date provided at sample request. |
| Change Type: | | | |
| <input type="checkbox"/> | Assembly Site | <input type="checkbox"/> | Assembly Process |
| <input type="checkbox"/> | Design | <input type="checkbox"/> | Assembly Materials |
| <input type="checkbox"/> | Test Site | <input type="checkbox"/> | Electrical Specification |
| <input type="checkbox"/> | Wafer Bump Site | <input type="checkbox"/> | Mechanical Specification |
| <input checked="" type="checkbox"/> | Wafer Fab Site | <input type="checkbox"/> | Packing/Shipping/Labeling |
| | | <input type="checkbox"/> | Test Process |
| | | <input type="checkbox"/> | Wafer Bump Material |
| | | <input type="checkbox"/> | Wafer Bump Process |
| | | <input type="checkbox"/> | Wafer Fab Materials |
| | | <input type="checkbox"/> | Wafer Fab Process |
| | | <input type="checkbox"/> | Part number change |

Notification Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its DMOS6 fabrication facility as an additional Wafer Fab source for the selected devices listed in the "Product Affected" section.

| Current Fab Site | | | Additional Fab Site | | |
|------------------|---------|----------------|---------------------|---------|----------------|
| Current Fab Site | Process | Wafer Diameter | Additional Fab Site | Process | Wafer Diameter |
| RFAB | LBC9 | 300 mm | DMOS6 | LBC9 | 300 mm |

Qual details are provided in the Qual Data Section.

Reason for Change:

Continuity of supply.

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None.

Changes to product identification resulting from this PCN:

Current

| Chip Site | Chip Site Origin (20L) | Chip Site Country Code (21L) | Chip Site City |
|-----------|------------------------|------------------------------|----------------|
| RFAB | RFB | USA | Richardson |

New Fab Site

| Chip Site | Chip Site Origin (20L) | Chip Site Country Code (21L) | Chip Site City |
|-----------|------------------------|------------------------------|----------------|
| DMOS6 | DM6 | USA | Dallas |

Sample product shipping label (not actual product label)



MADE IN: Malaysia
2DC: 20:

| | |
|-----------------------|----------|
| MSL 2 / 260C / 1 YEAR | SEAL DT |
| MSL 1 / 235C / UNLIM | 03/29/04 |

OPT:
ITEM: 39
LBL: 5A (L)T0:1750



(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483S12
(P)
(2P) REV: (V) 0039317
(20L) CS0: SHE (21L) CCO:USA
(22L) AS0: MLA (23L) ACO: MYS

Product Affected:

| | | | |
|--------------|--------------|--------------|--------------|
| DRV2634YFPR | PTAS2562YFPT | TAS2558YFPR | TAS2562HYFPT |
| DRV2634YFPT | TAS2558HYFPR | TAS2558YFPT | TAS2562YFPR |
| PTAS2562YFPR | TAS2558HYFPT | TAS2562HYFPR | TAS2562YFPT |

Qualification Report**Approve Date 30-Mar-2021****Qualification Results****Data Displayed as: Number of lots / Total sample size / Total failed**

| Type | Test Name / Condition | Duration | Qual Device: <u>TAS2562HYFP</u> | Qual Device: <u>TAS2562YFP</u> | QBS Product / Package Reference: <u>TAS2562HYFP</u> | QBS Process Reference: <u>BQ25910YFFR</u> |
|-------|-------------------------------|-------------------------------|------------------------------------|-----------------------------------|---|---|
| PREC | Precon Level 1 - DSBGA | Level 1- 260C | - | - | 3/1150/0 | - |
| ED | Electrical Characterization | Per Datasheet Parameters | - | 1/30/0 | 3/90/0 | 1/30/0 |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | - | - | 3/231/0 | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | - | - | 3/231/0 | 3/231/0 |
| TC | Temperature Cycle, -55/125C | 700 Cycles | - | - | 3/231/0 | 3/231/0 |
| HTSL | High Temp Storage Bake 170C | 420 Hours | - | - | 3/231/3 (1) | 3/231/0 |
| HTOL | Life Test, 140C | 480 Hours | - | - | 3/231/0 | 3/231/0 |
| HTOL | Life Test, 150C | 300 Hours | - | 1/77/0 | - | - |
| ELFR | Early Life Failure Rate, 140C | 24 Hours | - | - | - | 3/2400/0 |
| HBM | ESD - HBM | 2000 V | - | - | 3/9/0 | - |
| HBM | ESD - HBM | 3000 V | - | 1/3/0 | - | - |
| CDM | ESD - CDM | 1000 V | - | - | 3/9/0 | - |
| CDM | ESD - CDM | 1500 V | - | 1/3/0 | - | - |
| LU | Latch-up | Per JESD78 | - | 1/6/0 | 3/18/0 | - |
| SBS | Bump Shear | Balls | - | - | 3/108/0 | - |
| WLR | Wafer level Reliability | Per Site Specification | - | - | - | Pass |
| YLD | Yield Evaluation | (per mfg. Site specification) | Pass | Pass | Pass | - |

- QBS: Qual By Similarity
- Qual Device TAS2562YFP is qualified at LEVEL1-260C
- Qual Device TAS2562HYFP 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

- 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

Note (1): Two continuity short and one leakage fail due to test program problem. Program corrected. 8D attached to eQDB

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

| Location | E-Mail |
|-----------------|--|
| USA | PCNAmericasContact@list.ti.com |
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| Asia Pacific | PCNAsiaContact@list.ti.com |
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