



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN #: DSNO-09GUUD527

Date:

September 11, 2025

Qualification of MMT as an additional assembly site for selected SST26WF016B, SST26WF016BA, SST26WF080B, SST26WF080BA, SST26WF040B, SST26WF040BA, SST26VF032B, SST26VF032BA, SST26WF064C, SST26VF064BEUI, SST26VF016B, SST26VF080A, SST26VF040A, SST26VF020A, SST25VF080B, SST25VF020B, SST25VF040B, SST26VF064B, SST26VF064BA and SST25PF020B device families available in 8L WSON (6x5x0.8mm) package. This is Q006 Grade 1 qualification.

Purpose: Qualification of MMT as an additional assembly site for selected SST26WF016B, SST26WF016BA, SST26WF080B, SST26WF080BA, SST26WF040B, SST26WF040BA, SST26VF032B, SST26VF032BA, SST26WF064C, SST26VF064BEUI, SST26VF016B, SST26VF080A, SST26VF040A, SST26VF020A, SST25VF080B, SST25VF020B, SST25VF040B, SST26VF064B, SST26VF064BA and SST25PF020B device families available in 8L WSON (6x5x0.8mm) package. This is Q006 Grade 1 qualification.

CCB No.: 7830

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|--------------------------|--|---------------------------|
| <u>Misc.</u> | Assembly site | MMT |
| | BD Number | BD-003648-01 |
| | MP Code (MPC) | S01029U3XV01 |
| | Part Number (CPN) | SST26VF064B-104V/MF70SV01 |
| | MSL information | MSL-1@260C° |
| | Assembly Shipping Media (T/R, Tube/Tray) | Tube |
| | Base Quantity Multiple (BQM) | 98 |
| | Reliability Site | MTAI |
| <u>Lead-Frame</u> | Paddle size | 150x173 |
| | Material | A194 |
| | DAP Surface Prep | Bare Cu |
| | Treatment | Roughening LF |
| | Process | Etched LF |
| | Lead-lock | Dimple |
| | Part Number | 10100878 |
| | Lead Plating | Matte Tin |
| <u>Bond Wire</u> | Material | CuPdAu |
| <u>Die Attach</u> | Part Number | QMI519 (PFAS Free) |
| | Conductive | Yes |
| <u>MC</u> | Part Number | G700LTD |
| <u>PKG</u> | Package Type | WSON |
| | Pin/Ball Count | 8 |
| | PKG width/size | 6x5x0.8mm |

| Test Name | Conditions | Reliability Stress Read Point Grade 1: -40°C to +125°C (MCHP E Temp) | Pre & Post Reliability Stress Test Temperature Grade 1: -40°C to +125°C (MCHP E Temp) | Sample Size | Min. Qty of Spares per Lot (should be properly marked) | Qty of Lots | Total Units | Fail Accept Qty | Est. Dur. Days | Special Instructions |
|--|---|---|---|---|--|-------------|-------------|--------------------|----------------|---|
| Standard Pb-free Solderability | J-STD-002D : Perform 8 hours of steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Standard Pb-free: Matte tin/ NiPdAu finish, SAC solder, wetting temp 245°C for both SMD & through hole packages. | | | 22 | 5 | 1 | 27 | >95% lead coverage | 5 | Standard Pb-free solderability is the requirement. |
| Wire Bond Pull - WBP | Mil. Std. 883-2011 | | | 5 | 0 | 1 | 5 | 0 fails after TC | 5 | 30 bonds from a min. 5 devices. |
| Wire Bond Shear - WBS | CDF-AEC-Q100-001 | | | 5 | 0 | 1 | 5 | 0 | 5 | 30 bonds from a min. 5 devices. |
| Physical Dimensions | Measure per JESD22 B100 and B108 | | | 10 | 0 | 3 | 30 | 0 | 5 | |
| External Visual | Mil. Std. 883-2009/2010 | | | All devices prior to submission for qualification testing | 0 | 3 | ALL | 0 | 5 | |
| HTSL (High Temp Storage Life) | JESD22-A103 +125°C, +150°C or +175°C 2x Stress | <u>1st Readpoint:</u> Grade 1: 500 hrs (+175°C) or 1000 hrs (150°C) <u>2nd Readpoint:</u> Grade 1: 1000 hrs (+175°C) or 2000 hrs (150°C) | Grade 1: +25°C, +85°C, +125°C | 45 | 5 | 3 | 150 | 0 | 21 - 167 | Perform per the requirements in AEC-Q100/Q101. Spares should be properly identified. |
| Preconditioning - Required for surface mount devices | J-STD-020 JESD22-A113 +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type. | | Grade 1: +25°C, +85°C, +125°C | 231 | 15 | 3 | 738 | 0 | 15 | Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test. |
| HAST | JESD22-A101 or A110 +130°C/85% RH for 96 hrs or +110°C/85%RH for 264 hrs 2x Stress | <u>1st Readpoint:</u> Grade 1: 96 hrs (+130°C/85% RH) or 264 hrs (+110°C/85%RH) <u>2nd Readpoint:</u> Grade 1: 192 hrs (+130°C/85% RH) or 528 hrs (+110°C/85%RH) | Grade 1: +25°C, +85°C, +125°C | 77 | 5 | 3 | 246 | 0 | 10 - 22 | Perform per the requirements in AEC-Q006. Spares should be properly identified. Use the parts which have gone through Pre-conditioning. |
| uHAST | JESD22-A102, A118, or A101 +130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs | Grade 1: 96 hrs (+130°C/85% RH) or 264 hrs (+110°C/85% RH) | Grade 1: +25°C | 77 | 5 | 3 | 246 | 0 | 10 | Spares should be properly identified. Use the parts which have gone through Pre-conditioning. |
| Temp Cycle | JESD22-A104 -55°C to +125°C, -55°C to +150°C 2x Stress | <u>1st Readpoint:</u> Grade 1: 1000 cycles (-55°C to +150°C) <u>2nd Readpoint:</u> Grade 1: 2000 cycles (-55°C to +150°C) | Grade 1: +25°C, +85°C, +125°C | 77 | 5 | 3 | 246 | 0 | 15 - 120 | Perform per the requirements in AEC-Q006. Spares should be properly identified. Use the parts which have gone through Pre-conditioning. |