



QUALIFICATION PLAN SUMMARY

PCN #: GBNG-24WZVV475

**Date:
July 25, 2019**

**Discontinuance of UNIB assembly site as a qualified location
for selected products available in 8/14/16L PDIP, 20/28L
SSOP, 14/16/20L SOIC, and 48L LQFP packages.**

Purpose: Discontinuance of UNIB assembly site as a qualified location for selected products available in 8/14/16L PDIP, 20/28L SSOP, 14/16/20L SOIC, and 48L LQFP packages.

Lead-Frame Package/Die Data:

<u>Misc.</u>	Assembly site	LPI
	BD Number	MIC4468Y
	MP Code (MPC)	24807TD9XBA1
	Part Number (CPN)	MIC4468YWWM-TR
	MSL information	MSL 2 (260)
	Assembly Shipping Media (T/R, Tube/Tray)	Tube
	Base Quantity Multiple (BQM)	1000
	Reliability Site	MTAI
<u>Lead-Frame</u>	CCB No	3914
	Paddle size	184x146 mil
	Material	C194
	DAP Surface Prep	Without Ag plating
	Treatment	No
	Process	stamp
	Lead-lock	Yes
	Part Number	09S001669S0
	Lead Plating	Ag
	Strip Size	0.7177x7.413 inch
<u>Bond Wire</u>	Strip Density	14 units/strip
	Material	Au
<u>Die Attach</u>	Part Number	8340
	Conductive	Yes
<u>MC</u>	Part Number	EME-G600
<u>PKG</u>	PKG Type	SOIC
	Pin/Ball Count	16L
	PKG width/size	300mils
<u>Die</u>	Die Thickness	12mils
	Die Size	96x112mils
	Fab Process (site)	Tempe/Gresham 8"

Commented [CY1]: Please make modifications to this section as appropriate to accommodate unique packages, BGA, Modules, etc. You may also cut and paste this data into the qualification plan page 2 for convenience. Typically fill in the existing and new data/qual columns but if this is a new package or device only fill in one column (either existing or new report). If this is a change to an existing package or site but will QBS to a previous qual then please fill in all 3 columns to show what the existing BOM is, what the proposed new BOM will be, and what the existing qual report BOM is – note the new BOM and QBS qual report should match or a new qual may be required.

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	ATE Test Site	REL Test Site	Pkg. Type	Special Instructions
Standard Pb-free Solderability	J-STD-002D ; Perform 8 hour 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	UNIS	MTAI	SOIC	Standard Pb-free solderability is the requirement. SnPb solderability (backward solderability- SMD reflow soldering) is required for any plating related changes and highly recommended for other package BOM changes.
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	UNIS	MTAI	SOIC	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	UNIS	MTAI	SOIC	30 bonds from a min. 5 devices.
Wire Sweep		5	0	3	15	0		UNIS	MTAI	SOIC	Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	UNIS	MTAI	SOIC	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	UNIS	MTAI	SOIC	
HTSL (High Temp Storage Life)	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C and hot temp.	45	5	1	50	0	10	UNIS	MTAI	SOIC	Must be in progress at time of package release to production, but completion is not required for release to production.

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	ATE Test Site	REL Test Site	Pkg. Type	Special Instructions
Preconditioning - Required for surface mount devices	+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; Electrical test pre and post stress at +25°C. MSL2 @ 260°C	231	15	3	738	0	15	UNIS	MTAI	SOIC	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp.	77	5	3	246	0	10	UNIS	MTAI	SOIC	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	UNIS	MTAI	SOIC	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	UNIS	MTAI	SOIC	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.