QUALIFICATION PLAN SUMMARY

PCN #: BLAS-18WDJY028

Date:
March 25, 2026

Qualification of STAK as an additional assembly site for LAN8CFG-V/3HW, LAN8043-V/3HW, LAN8024-V/3HW, LAN8044-V/3HW, LAN8263-V/3HW and LAN8268-V/3HW catalog part numbers (CPN) available in 256L FCCSP (14x14x1.78mm) package.

Purpose: Qualification of STAK as an additional assembly site for LAN8CFG-V/3HW, LAN8043-V/3HW, LAN8024-V/3HW, LAN8044-V/3HW, LAN8263-V/3HW and LAN8268-V/3HW catalog part numbers (CPN) available in 256L FCCSP (14x14x1.78mm) package.

CCB #: 8199

Misc.	Assembly site	STAK
	BD Number	STAK BD: 075251G-A_02-bnd
	MP Code (MPC)	ST00593HWA18
	Part Number (CPN)	LAN8044-V/3HW
	MSL information	MSL 3, 260°C
	Assembly Shipping Media (T/R, Tube/Tray)	KostatTray
	Base Quantity Multiple (BQM)	119
Substrate	Core Material	DS7409HG ZSE
	Core Thickness	150 ±20 um
	Prepreg material and thickness	DS7409HG ZSE; 50 ± 10 um
	L1/L2 Thickness (6L Substrate)	L1/L6: 12 ± 5um L2-L5: 15 ± 5um
	SM Material	AUS SR1
	Process	Build up
	SM Thickness	12 ± 5 um
	Part Number	STAK p/n: R001-V383U
	Substrate Thickness	458 ± 40um
	Drill Size	Via: 65 ± 15 um PTH: 150 ± 20 um
	Line/Space Specs	15/15 um
Bump	Material	Sn1.8Ag
	Bump Diameter	96um
	Bump Site (if different from Assembly site)	TSMC
Chip Attach	Chip Attach material	WF6317
HS Epoxy	Heat Spreader P/N	R011-0878X Cu + Ni Flat lid
	Heat Spreader bond material	SE-4450
	TIM Epoxy	SE-4450
	Conductive	Yes
Underfill	Part Number	U8410-302NP
Molding	Part Number	KE-G2250SK
PKG	Package Type	FCCSP
	Pin/Ball Count	256
	PKG width/size	14x14x1.78mm
	Ball Pitch/Size	0.8mm / 0.51mm
	Solder ball type	SAC305
	Solder ball flux	WF6317

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
Solder Ball Shear	JESD22B117A	5	0	3	15		5		STAK	FCCSP	10 balls/5 units. Parts should gone Preconditioning
Coplanarity	JESD22B108A/POD	All units	0	3	All units				STAK	FCCSP	All units
Physical Dimmensions	Measure per JESD22 B100 and B108	10	0	3	30		5		MTAI	FCCSP	
High Temperature Storage Life (HTSL)	JESD22-A103. 150°C for 1008 hours. Readpoints at 0, 504, and 1008 hours. Electrical test pre and post stress at +25°C and hot temp +115°C.	45	5	1	50	0	45	MTAI	MTAI	FCCSP	Spare should be properly identified.
Preconditioning - Required for surface mount devices MSL-3 @260°C	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; Electrical test pre and post stress at +25°C. JESD22A113.	231	15	3	738	0	15	MTAI	MTAI	FCCSP	Spares should be properly identified.
HAST	JESD22-A110. +110°C/85% RH for 264 hours. Electrical test pre and post stress at +25°C and hot temp +115°C.	77	5	3	246	0	10	MTAI	MTAI	FCCSP	Spare should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST	JESD22-A118. ~~+130°C/85% RH for 96 hours or~~ +110°C/85% RH for 264 hours. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	MTAI	MTAI	FCCSP	Spare should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A104. -55°C to +125°C for 1000 cycles (i.e. Cond. B). Electrical test pre and post stress at hot temp +115°C.	77	5	3	246	0	30	MTAI	MPHIL	FCCSP	Spare should be properly identified. Use the parts which have gone through Pre-conditioning.