

# QM81050

## Boost-Buck PMIC for Mobile Applications

Qorvo RF CMOS Controller Technology

**Package Type:** WLCSP  
**Process Technology:** Si  
**Qualification Number:** 17-QUAL-4142, 19-QUAL-5402  
**Date Issued:** 03/02/2020  
**Document Number:** QM81050-PQ030 rev D, updated for supply chain expansion.

TEST NAME	TEST STANDARD AND CONDITIONS	# SAMPLES x # LOTS	TEST RESULTS
High Temperature Operating Lifetime (HTOL)	JESD22-A108, $T_j \geq 125^\circ\text{C}$ , 1000 hours	77x3 lots	pass
Highly Accelerated Temperature and Humidity Stress Test (HAST)	JESD22-A110, 96 hours, Condition A ( $130^\circ\text{C}$ , 85% RH, 33.3 psia), Preconditioned to MSL1 per JESD22-A113	77x3 lots	pass
ESD Human Body Model (ESD HBM)	ANSI/ESDA/JEDEC JS-001, $T_A = 25^\circ\text{C}$	3x3 lots	Class 1C Pass 1000V
ESD Charge Device Model (ESD-CDM)	ANSI /ESD/JEDEC JS-002, $T_A = 25^\circ\text{C}$	3x3 lots	Class C3 Pass 1000V
Latch Up (LU)	JESD78, Class I	3x3 lots	Pass
Moisture Sensitivity Level (MSL)	IPC/JEDEC J-STD-020, Classification Temperature $T_c = 260^\circ\text{C}$	11x3 lots	MSL1
Temperature Cycling (TC)	JESD22-A104, 850 cycles Condition G ( $-40^\circ\text{C}$ to $+125^\circ\text{C}$ ), Soak Mode 2, Preconditioned to MSL1 per JESD22-A113	77x3 lots	Pass
High Temperature Storage Life (HTS)	JESD22-A103, 1000 hours Condition B ( $T_A = 150^\circ\text{C}$ ), Preconditioned with 3x reflow per JESD22-A113	77x3 lots	Pass
Unbiased HAST (uHAST)	JESD22-A118, 96 hours Condition A ( $130^\circ\text{C}$ , 85% RH, 33.3 psia), Preconditioned to MSL1 per JESD22-A113	77x3 lots	Pass
Temperature Cycling (TCB)	JESD22-A104, 850 cycles Condition G ( $-40^\circ\text{C}$ to $+125^\circ\text{C}$ ), Soak Mode 2, Preconditioned to MSL1 per JESD22-A113	33x3 lots on boards	Pass
Conclusion	This part meets Qorvo's product qualification requirements.		

Sample size and lot quantities reported are the minimum required for this qualification.