

PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package Pins	Package qty Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
M0L1227QPMRQ1	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1227Q
M0L1227QPMRQ1.A	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L1227QPMRQ1	M0L1227Q
M0L1227QPMRQ1.B	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L1227QPMRQ1	M0L1227Q
M0L1227QPNRQ1	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1227Q
M0L1227QPNRQ1.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L1227QPNRQ1	M0L1227Q
M0L1227QPNRQ1.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L1227QPNRQ1	M0L1227Q
M0L1227QPTRQ1	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1227Q
M0L1227QPTRQ1.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L1227QPTRQ1	M0L1227Q
M0L1227QPTRQ1.B	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L1227QPTRQ1	M0L1227Q
M0L1227QRGERQ1	Active	Production	VQFN (RGE) 24	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1227Q
M0L1227QRGERQ1.A	Active	Production	VQFN (RGE) 24	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	See M0L1227QRGERQ1	MSPM0 L1227Q
M0L1227QRGERQ1.B	Active	Production	VQFN (RGE) 24	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	See M0L1227QRGERQ1	MSPM0 L1227Q
M0L1227QRGZRQ1	Active	Production	VQFN (RGZ) 48	4000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1227Q
M0L1227QRGZRQ1.A	Active	Production	VQFN (RGZ) 48	4000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	See M0L1227QRGZRQ1	MSPM0 L1227Q
M0L1227QRGZRQ1.B	Active	Production	VQFN (RGZ) 48	4000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	See M0L1227QRGZRQ1	MSPM0 L1227Q
M0L1227QRHBRQ1	Active	Production	VQFN (RHB) 32	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-	MSPM0 L1227Q
M0L1227QRHBRQ1.A	Active	Production	VQFN (RHB) 32	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	See M0L1227QRHBRQ1	MSPM0 L1227Q
M0L1227QRHBRQ1.B	Active	Production	VQFN (RHB) 32	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	See M0L1227QRHBRQ1	MSPM0 L1227Q
M0L1228QPMRQ1	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QPMRQ1.A	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QPMRQ1.B	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QPNRQ1	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q

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M0L1228QPNRQ1.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QPNRQ1.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QPTRQ1	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QPTRQ1.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QPTRQ1.B	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L1228Q
M0L1228QRGERQ1	Active	Production	VQFN (RGE) 24	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRGERQ1.A	Active	Production	VQFN (RGE) 24	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRGERQ1.B	Active	Production	VQFN (RGE) 24	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRGZRQ1	Active	Production	VQFN (RGZ) 48	4000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRGZRQ1.A	Active	Production	VQFN (RGZ) 48	4000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRGZRQ1.B	Active	Production	VQFN (RGZ) 48	4000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRHBRQ1	Active	Production	VQFN (RHB) 32	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRHBRQ1.A	Active	Production	VQFN (RHB) 32	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L1228QRHBRQ1.B	Active	Production	VQFN (RHB) 32	5000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	MSPM0 L1228Q
M0L2227QPMRQ1	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2227Q
M0L2227QPMRQ1.A	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L2227QPMRQ1	M0L2227Q
M0L2227QPMRQ1.B	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L2227QPMRQ1	M0L2227Q
M0L2227QPNRQ1	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2227Q
M0L2227QPNRQ1.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L2227QPNRQ1	M0L2227Q
M0L2227QPNRQ1.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L2227QPNRQ1	M0L2227Q
M0L2227QPTRQ1	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2227Q
M0L2227QPTRQ1.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L2227QPTRQ1	M0L2227Q
M0L2227QPTRQ1.B	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	See M0L2227QPTRQ1	M0L2227Q
M0L2228QPMRQ1	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q

Orderable part number	Status (1)	Material type (2)	Package Pins	Package qty Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
M0L2228QPMRQ1.A	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
M0L2228QPMRQ1.B	Active	Production	LQFP (PM) 64	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
M0L2228QPNRQ1	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
M0L2228QPNRQ1.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
M0L2228QPNRQ1.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
M0L2228QPTRQ1	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
M0L2228QPTRQ1.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
M0L2228QPTRQ1.B	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 125	M0L2228Q
XM0L1228QPTRQ1.B	Active	Preproduction	LQFP (PT) 48	1000 LARGE T&R	-	Call TI	Call TI	-40 to 125	
XM0L1228QRGERQ1.B	Active	Preproduction	VQFN (RGE) 24	3000 LARGE T&R	-	Call TI	Call TI	-40 to 125	
XM0L1228QRHBRQ1	Active	Preproduction	VQFN (RHB) 32	3000 LARGE T&R	-	Call TI	Call TI	-40 to 125	
XM0L1228QRHBRQ1.B	Active	Preproduction	VQFN (RHB) 32	3000 LARGE T&R	-	Call TI	Call TI	-40 to 125	
XM0L2228QPMRQ1.B	Active	Preproduction	LQFP (PM) 64	1000 LARGE T&R	-	Call TI	Call TI	-40 to 125	
XM0L2228QPNRQ1.B	Active	Preproduction	LQFP (PN) 80	1000 LARGE T&R	-	Call TI	Call TI	-40 to 125	
XM0L2228QPTRQ1.B	Active	Preproduction	LQFP (PT) 48	1000 LARGE T&R	-	Call TI	Call TI	-40 to 125	

⁽¹⁾ **Status:** For more details on status, see our [product life cycle](#).

⁽²⁾ **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

⁽³⁾ **RoHS values:** Yes, No, RoHS Exempt. See the [TI RoHS Statement](#) for additional information and value definition.

⁽⁴⁾ **Lead finish/Ball material:** Parts may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

⁽⁵⁾ **MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.

⁽⁶⁾ **Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "~" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

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OTHER QUALIFIED VERSIONS OF MSPM0L1227-Q1, MSPM0L1228-Q1, MSPM0L2227-Q1, MSPM0L2228-Q1 :

- Catalog : [MSPM0L1227](#), [MSPM0L1228](#), [MSPM0L2227](#), [MSPM0L2228](#)

NOTE: Qualified Version Definitions:

- Catalog - TI's standard catalog product