

AN048: Overview of TRINAMIC ICs, Available Packages, and Order Codes

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This application note is an overview on all available TRINAMIC IC products and their package options and order codes.

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3 Overview of TRINAMIC ICs, Available Packages, and Order Codes

The following tables contain the available and optional combinations of IC products and packages. The application note is regularly updated regarding new products or discontinued products.

Details for each package (package outline drawing, dimensions, and recommended land patterns) are available for each package individually as Application Note 005 titled "AN005: IC Package / PCB Footprint Guidelines - <package type>" on www.trinamic.com.

The order code for an IC package consists of the IC name TMCxxxx plus the suffix for the package, e.g., -LA.

3.1 BGA Type Packages

IC	Packages						
	LGA51 (12x17)	FBGA400 (17x17)	FBGA144 (13x13)	BGA121 (9x9)	BGA144 (10x10)	FBGA256 (17x17)	FBGA325 (11x11)
TMC332	-	-	-BC	-	-	-	-
TMC457	-	-	-BC	-	-	-	-
TMC4670	-	-	-	-	-	-BI	-
TMC8460	-	-BI	-	-	-	-	-
TMC8461	-	-	-	-	-BA	-	-
TMC8462	-	-	-	-BA	-	-	-
TMC8670	-	-	-	-	-	-	-BI
TMCC160	-LC	-	-	-	-	-	-

Table 1: Overview Trinamic chip products in BGA type packages

3.2 SO/SOP Type Packages

IC	Packages				
	SSOP 16	SO 20	SOP 24	SO 28	HTSSOP28 (9.7x6.4)
TMC222/3	-SI	-	-	-	-
TMC2225	-	-	-	-	-SA
TMC239A	-	-	-	-SA	-
TMC249A	-	-	-	-SA	-
TMC429	-I	-	-PI24	-	-
TMC4210	-I	-	-	-	-

Table 2: Overview Trinamic chip products in SO/SOP type packages



3.3 QFN Type Packages

IC	Packages										
	QFN28 (5x5)	QFN32 (4x4)	QFN32 (5x5)	QFN36 (5x6)	QFN32 (7x7)	QFN40 (6x6)	QFN48 (7x7)	QFN52 (8x8)	Wettable QFN56 (8x8)	QFN76 (9x9)	Wettable QFN32 (5x5)
TMC2041	-	-	-	-	-	-	-LA	-	-	-	-
TMC2100	-	-	-	-LA	-	-	-	-	-	-	-
TMC2130	-	-	-	-LA	-	-	-	-	-	-	-
TMC2202	-	-	-	-	-	-	-	-	-	-	-WA
TMC2208	-LA	-	-	-	-	-	-	-	-	-	-
TMC2224	-LA	-	-	-	-	-	-	-	-	-	-
TMC222/3	-	-	-	-	-LI	-	-	-	-	-	-
TMC239A	-	-	-	-	-LA	-	-	-	-	-	-
TMC248	-LA	-	-	-	-	-	-	-	-	-	-
TMC249A	-	-	-	-	-LA	-	-	-	-	-	-
TMC262	-	-	-LA	-	-	-	-	-	-	-	-
TMC389	-	-	-LA	-	-	-	-	-	-	-	-
TMC424	-	-	-	-	-	-	-	-	-	-	-
TMC429	-	-	-LI	-	-	-	-	-	-	-	-
TMC4330A	-	-LA	-	-	-	-	-	-	-	-	-
TMC4331A	-	-LA	-	-	-	-	-	-	-	-	-
TMC4361A	-	-	-	-	-	-LA	-	-	-	-	-
TMC4671	-	-	-	-	-	-	-	-	-	-LA	-
TMC5031	-	-	-	-	-	-	-LA	-	-	-	-
TMC5041	-	-	-	-	-	-	-LA	-	-	-	-
TMC5062	-	-	-	-	-	-	-LA	-	-	-	-
TMC5072	-	-	-	-	-	-	-LA	-	-	-	-
TMC5160	-	-	-	-	-	-	-	-	-WA	-	-
TMC603A	-	-	-	-	-	-	-	-LA	-	-	-
TMC6130	-	-	-LA	-	-	-	-	-	-	-	-

Table 3: Overview Trinamic chip products in QFN type packages



3.4 QFP Type Packages

IC	Packages		
	LQFP44 (10x10)	eTQFP48 (7x7)	TQFP100 (16x16)
TMC2100	-	-TA	-
TMC2130	-	-TA	-
TMC2220	-	-TA	-
TMC236B	-PA	-	-
TMC246B	-PA	-	-
TMC260	-PA	-	-
TMC261	-PA	-	-
TMC2660	-PA	-	-
TMC424	-	-	x
TMC5130A	-	-TA	-
TMC5160	-	-TA	-

Table 4: Overview Trinamic chip products in QFP type packages

3.5 Disclaimer

TRINAMIC Motion Control GmbH & Co. KG does not authorize or warrant any of its products for use in life support systems, without the specific written consent of TRINAMIC Motion Control GmbH & Co. KG. Life support systems are equipment intended to support or sustain life, and whose failure to perform, when properly used in accordance with instructions provided, can be reasonably expected to result in personal injury or death.

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Specifications are subject to change without notice.

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4 Revision History

Version	Date	Author	Description
V1.00	2017-June-13	SK	V1.00 release version

Table 5: Document Revision

