

Trion® FPGA Selector Guide



4K to 200K
Logic Elements



5 Kb Embedded
RAM Blocks



18 x 18
Multipliers



PLLs



GPIO



LVDS



MIPI CSI-2
& D-PHY



DDR DRAM
Controller & PHY



SPI & JTAG
Configuration

Trion Ordering Codes

FPGA	LEs	RAM (kbits)	RAM Blocks (5 Kb)	Multipliers	Package	Pins	GPIO	PLLs	Oscillator	LVDS TX Pairs	LVDS RX Pairs	MIPI TX	MIPI RX	DDR	Temperature	Speed Grade	Ordering Code			
T4	3,888	76.8	15	4	FBGA	49	33	1	1	-	-	-	-	-	C	2	T4F49C2			
						81	55	1	1	-	-	-	-	-	I	2	T4F49I2			
					FBGA	49	33	1	1	-	-	-	-	-	-	-	-	C	2	T4F81C2
						81	55	1	1	-	-	-	-	-	-	-	-	I	2	T4F81I2
T8	7,384	122.88	24	8	FBGA	49	33	1	1	-	-	-	-	-	C	2	T8F49C2			
						81	55	1	1	-	-	-	-	-	-	I	2	T8F49I2		
					FBGA	49	33	1	1	-	-	-	-	-	-	-	-	C	2	T8F81C2
						81	55	1	1	-	-	-	-	-	-	-	-	I	2	T8F81I2
T13	12,828	727.04	142	24	FBGA	169	73	5	-	8	12	2	2	-	C	3, 4	T13F169C3/4			
						256	195	5	-	13	13	-	-	-	I	4	T13F169I4			
					FBGA	169	73	5	-	8	12	2	2	-	-	-	-	C	3, 4	T13F256C3/4
						256	195	5	-	13	13	-	-	-	-	-	-	I	4	T13F256I4
T20	19,728	1,044.48	204	36	FBGA	169	73	5	-	8	12	2	2	-	C	3, 4	T20F169C3/4			
						256	195	5	-	13	13	-	-	-	I	4	T20F169I4			
					FBGA	169	73	5	-	8	12	2	2	-	-	-	-	C	3, 4	T20F256C3/4
						256	195	5	-	13	13	-	-	-	-	-	-	I	4	T20F256I4
					FBGA	324	130	7	-	20	26	2	2	x8, x16	-	-	-	C	3, 4	T20F324C3/4
						400	230	7	-	20	26	-	-	x8, x16	-	-	-	I	4	T20F324I4
T35	31,680	1,475	288	120	FBGA	324	130	7	-	20	26	2	2	x8, x16	C	3, 4	T35F324C3/4			
						400	230	7	-	20	26	-	-	x8, x16	I	4	T35F324I4			
					FBGA	324	130	7	-	20	26	2	2	x8, x16	-	-	-	C	3, 4	T35F400C3/4
						400	230	7	-	20	26	-	-	x8, x16	-	-	-	I	4	T35F400I4

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FPGA	LEs	RAM (kbits)	RAM Blocks (5 Kb)	Multipliers	Package	Pins	GPIO	PLLs	Oscillator	LVDS TX Pairs	LVDS RX Pairs	MIPI TX	MIPI RX	DDR	Temperature	Speed Grade	Ordering Code
T55	54,195	2,765	540	150	FBGA	324	130	7	-	20	26	2	2	x8, x16	C	3, 4	T55F324C3/4
															I	4	T55F324I4
					FBGA	484	256	8	-	40	40	-	-	x16/x32	C	3, 4	T55F484C3/4
															I	4	T55F484I4
					FBGA	576	278	8	-	52	52	3	3	x16/x32	C	3, 4	T55F576C3/4
															I	4	T55F576I4
T85	84,096	4,055	792	240	FBGA	324	130	7	-	20	26	2	2	x8, x16	C	3, 4	T85F324C3/4
															I	4	T85F324I4
					FBGA	484	256	8	-	40	40	-	-	x16/x32	C	3, 4	T85F484C3/4
															I	4	T85F484I4
					FBGA	576	278	8	-	52	52	3	3	x16/x32	C	3, 4	T85F576C3/4
															I	4	T85F576I4
T120	112,128	5,407	1,056	320	FBGA	324	130	7	-	20	26	2	2	x8, x16	C	3, 4	T120F324C3/4
															I	4	T120F324I4
					FBGA	484	256	8	-	40	40	-	-	x16/x32	C	3, 4	T120F484C3/4
															I	4	T120F484I4
					FBGA	576	278	8	-	52	52	3	3	x16/x32	C	3, 4	T120F576C3/4
															I	4	T120F576I4

Package Dimensions

Package	Pitch	Dimensions (mm)
49-ball FBGA	0.4	3x3
81-ball FBGA	0.5	5x5
144-pin LQFP	0.5	20x20

Package	Pitch	Dimensions (mm)
169-ball FBGA	0.65	9x9
324-ball FBGA	0.65	12x12
576-ball FBGA	0.65	16x16

Package	Pitch	Dimensions (mm)
256-ball FBGA	0.8	13x13
400-ball FBGA	0.8	16x16
484-ball FBGA	0.8	18x18

