

MAX 10 FPGA – Family Plan

Device	LEs	Block Memory (Kb)	User Flash 1 (Kb)	18x18 Mults	PLLs	Internal Config.	ADC 4, TSD	External RAM I/F
10M02	2,000	108	96	16	1, 2	Single	-	Yes 2
10M04	4,000	189	128	19	1, 2	Dual	1, 1	Yes 2
10M08	8,000	378	256	24	1, 2	Dual	1, 1	Yes 2
10M16	16,000	549	256	45	1, 4	Dual	1, 1	Yes 3
10M25	25,000	756	256	61	1, 4	Dual	2, 1	Yes 3
10M40	40,000	1,260	512	125	1, 4	Dual	2, 1	Yes 3
10M50	50,000	1,638	512	144	1, 4	Dual	2, 1	Yes 3

Notes:

1. *Additional User Flash may be available, depending on configuration options.*
2. *SDR SDRAM or SRAM only.*
3. *SDR SDRAM, SRAM, DDR3, DDR2, or LPDDR2.*
4. *ADC blocks available on die but may not be available in low pin count packages.*

MAX 10 FPGA - Feature Set Options

Feature Set	C: Compact	F: Flash	A: Analog
Single Image	Yes	Yes	Yes
Dual Image w/Remote System Upgrade	-	Yes	Yes
Analog Features Block	-	-	Yes

“C”

“F”

“A”

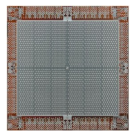
***Three Feature Set Variants
To Order From***

Package Plan & Available I/O *(Dual Power Supply: 1.2V/2.5V)*

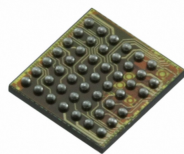
Product Line	36-WLCSP 3x3mm ² 0.4mm Pitch	81-WLCSP 4x4mm ² 0.4mm Pitch	256-FBGA 17x17mm ² 1.0mm Pitch	324-UBGA 15x15mm ² 0.8mm Pitch	484-FBGA 23x23mm ² 1.0mm Pitch	672-FBGA 27x27mm ² 1.0mm Pitch
10M02 "D"	C (27)	-	-	C (160)	-	-
10M04 "D"	-	-	C/F/A (178)	C/F/A (246)	-	-
10M08 "D"	-	C/F (56)	C/F/A (178)	C/F/A (246)	C/F/A (250)	-
10M16 "D"	-	-	C/F/A (178)	C/F/A (246)	C/F/A (320)	-
10M25 "D"	-	-	C/F/A (178)	-	C/F/A (360)	C/F/A (380)
10M40 "D"	-	-	C/F/A (178)	-	C/F/A (360)	C/F/A (500)
10M50 "D"	-	-	C/F/A (178)	-	C/F/A (360)	C/F/A (500)

*Note: Selected items = Pro-active automotive p/n rollout.
Other product line/package combinations available upon request & sufficient ROI.*

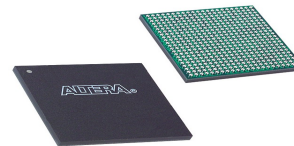
Preliminary and subject to change without notice



Bare Die



WLCSP



xBGA

U = 0.8mm ball spacing
F = 1.0mm ball spacing

C: Compact

F: Flash

A: Analog

Wide Variety of Sizes & Available I/O

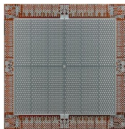
Package Plan & Available I/O *(Single Power Supply: 3.3V)*

Product Line	144-EQFP 16x16 mm ² 0.4 mm Pitch	153-MBGA 8x8mm ² 0.5mm(1)	169-UBGA 11x11mm ² 0.8mm
10M02 "S"	■ C (101)	■ C (112)	■ C (130)
10M04 "S"	■ C/F/A (101)	■ C/F/A (112)	■ C/F/A (130)
10M08 "S"	■ C/F/A (101)	■ C/F/A (112)	■ C/F/A (130)
10M16 "S"	■ C/F/A (101)	-	■ C/F/A (130)
10M25 "S"	■ C/F/A (101)	-	-
10M40 "S"	■ C/F/A (101)	-	-
10M50 "S"	■ C/F/A (101)	-	-

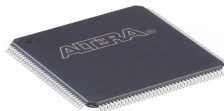
Notes:

- 1 – "Easy PCB" utilizes 0.8mm PCB design rules
- 2 - Items in blue = Pro-active automotive p/n's.
- Others available upon request & sufficient ROI.

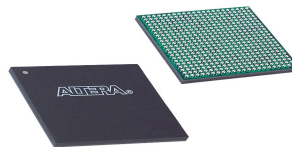
Preliminary and subject to change without notice



Bare Die



EQFP



xBGA

M = 0.5mm ball spacing
U = 0.8mm ball spacing

C: Compact

F: Flash

A: Analog

**Single Supply Option for
Simplicity & Convenience**