

ALTERA FPGAs and CPLDs



now part of Intel

Programmable Logic Altera

CYCLONE V FAMILY FPGAS (CONT.)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Altera Part No.	Package	Speeds	No. of LABs/CLBs	No. of Logic Elements/Cells	Embedded Memory (Kbits)	No. of I/Os	PLLs	Supply Voltage (V)	Temperature Range (°C)	Price Each
Cyclone V GX (Cont.)											
989-5CGXFC7D6F2717N	5CGXFC7D6F2717N	FBGA-672	-7	5648	149500	7696	336	7	1.1	-40 to 85	335.14
989-5CGXFC5C6F2317N	5CGXFC5C6F2317N	FBGA-484	-7	29080	77000	424	240	6	1.1	-40 to 85	184.50
989-5CGXFC7C6F23C6N	5CGXFC7C6F23C6N	FBGA-484	-6	56480	149500	836	240	7	1.1	0 to 70	296.88
Cyclone V SoC SE											
989-5CSEBA5U1917N	5CSEBA5U1917N	UBGA-484	-7	3207	85000	480	66	6	1.8, 2.5, 3, 3.3	-40 to 100	164.09

MAX 10 FAMILY FPGAS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Altera Part No.	Package	Logic Elements	No. of LABs/CLBs	Memory Size (Kb)	No. of I/Os	Supply Voltage (V)	Temperature Range (°C)	Price Each
989-10M02DCU324I7G	10M02DCU324I7G	UBGA-324	2000	125	108	160	2.5	-40 to 100	11.16
989-10M02DCU324C8G	10M02DCU324C8G	UBGA-324	2000	125	108	160	2.5	0 to 85	8.37
989-10M02DCV36C8G	10M02DCV36C8G	WLCSP-36	2000	125	108	27	2.5	0 to 85	3.78
989-10M02SCE144C8G	10M02SCE144C8G	EQFP-144	2000	125	108	101	3.3	0 to 85	7.38
989-10M04DAF256C8G	10M04DAF256C8G	FBGA-256	4000	250	189	178	2.5	0 to 85	17.19
989-10M04DCF256C8G	10M04DCF256C8G	FBGA-256	4000	250	189	178	2.5	0 to 85	12.87
989-10M04SAE144C8G	10M04SAE144C8G	EQFP-144	4000	250	189	101	3.3	0 to 85	15.66
989-10M04SCE144C8G	10M04SCE144C8G	EQFP-144	4000	250	189	101	3.3	0 to 85	11.43
989-10M08DCF484C8G	10M08DCF484C8G	FBGA-484	8000	500	378	250	2.5	0 to 85	27.63
989-10M08SAE144C8G	10M08SAE144C8G	EQFP-144	8000	500	378	101	3.3	0 to 85	21.78
989-10M08SCE144C8G	10M08SCE144C8G	EQFP-144	8000	500	378	101	3.3	0 to 85	17.46
989-10M16DAF256C8G	10M16DAF256C8G	FBGA-256	16000	1000	549	178	2.5	0 to 85	44.10
989-10M16DAF484C8G	10M16DAF484C8G	FBGA-484	16000	1000	549	320	2.5	0 to 85	51.84
989-10M16DCF256C8G	10M16DCF256C8G	FBGA-256	16000	1000	549	178	2.5	0 to 85	38.34
989-10M16DCF484C8G	10M16DCF484C8G	FBGA-484	16000	1000	549	320	2.5	0 to 85	46.08
989-10M16DCU324C8G	10M16DCU324C8G	UBGA-324	16000	1000	549	246	2.5	0 to 85	38.34
989-10M16SAE144C8G	10M16SAE144C8G	EQFP-144	16000	1000	549	101	3.3	0 to 85	39.87
989-10M16SAU169C8G	10M16SAU169C8G	UBGA-169	16000	1000	549	130	3.3	0 to 85	33.12
989-10M16SCE144C8G	10M16SCE144C8G	EQFP-144	16000	1000	549	101	3.3	0 to 85	34.11
989-10M16SCU169C8G	10M16SCU169C8G	UBGA-169	16000	1000	549	130	3.3	0 to 85	27.36
989-10M40DAF256C8G	10M40DAF256C8G	FBGA-256	40000	2500	1.26Mb	178	2.5	0 to 85	80.01
989-10M40DAF484C8G	10M40DAF484C8G	FBGA-484	40000	2500	1.26Mb	360	2.5	0 to 85	89.10
989-10M40DCF484C8G	10M40DCF484C8G	FBGA-484	40000	2500	1.26Mb	360	2.5	0 to 85	79.92
989-10M40DCF672C8G	10M40DCF672C8G	FBGA-672	40000	2500	1.26Mb	500	2.5	0 to 85	88.11
989-10M40SCE144C8G	10M40SCE144C8G	EQFP-144	40000	2500	1.26Mb	101	3.3	0 to 85	51.66
989-10M50DCF256C8G	10M50DCF256C8G	FBGA-256	50000	3125	1.638Mb	178	2.5	0 to 85	115.47
989-10M50DCF484C8G	10M50DCF484C8G	FBGA-484	50000	3125	1.638Mb	360	2.5	0 to 85	126.54
989-10M50DCF672C8G	10M50DCF672C8G	FBGA-672	50000	3125	1.638Mb	500	2.5	0 to 85	136.35
989-10M50SCE144C8G	10M50SCE144C8G	EQFP-144	50000	3125	1.638Mb	101	3.3	0 to 85	57.69

MAX FAMILY CLPDS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Altera Part No.	Package	Logic Elements	Typical Equivalent Macrocells	Speed Grade	No. of I/Os	Max. Delay Time tpd (1) (ns)	Internal Voltage Supply (V)	Operating Temp. Range (°C)	Price Each
MAX II										
989-EPM240F100C4N	EPM240F100C4N	FBGA-100	240	192	-4	80	4.7	2.5, 3.3	0 to 85	10.62
989-EPM240F100C5N	EPM240F100C5N	FBGA-100	240	192	-5	80	4.7	2.5, 3.3	0 to 85	7.62
989-EPM240F100I5N	EPM240F100I5N	LBGA-100	240	192	-5	80	4.7	2.5, 3.3	-40 to 100	10.62
989-EPM240GF100I5N	EPM240GF100I5N	LBGA-100	240	192	-5	80	4.7	1.8	-40 to 100	10.62
989-EPM240GT100C5N	EPM240GT100C5N	EQFP-100	240	192	-5	80	7.7	1.8	0 to 85	7.50
989-EPM240GT100I5N	EPM240GT100I5N	TQFP-100	240	192	-5	80	4.7	1.8	-40 to 100	10.37
989-EPM240M100C4N	EPM240M100C4N	MBGA-10	240	192	-4	80	4.7	2.5, 3.3	0 to 85	10.37
989-EPM240M100C5N	EPM240M100C5N	BGA-100	240	192	-5	80	4.7	2.5, 3.3	0 to 70	7.50
989-EPM240M100I5N	EPM240M100I5N	MBGA-100	240	192	-5	80	4.7	2.5, 3.3	-40 to 100	10.37
989-EPM240T100C3N	EPM240T100C3N	TQFP-100	240	192	-3	80	4.7	2.5, 3.3	0 to 85	14.87
989-EPM240T100C4N	EPM240T100C4N	TQFP-100	240	192	-4	80	4.7	2.5, 3.3	0 to 85	10.37
989-EPM240T100C5N	EPM240T100C5N	TQFP-100	240	192	-5	80	4.7	2.5, 3.3	0 to 85	7.50
989-EPM240T100I5N	EPM240T100I5N	TQFP-100	240	192	-5	80	4.7	2.5, 3.3	-40 to 100	10.37
989-EPM240ZM100C6N	EPM240ZM100C6N	TQFP-100	240	192	-6	80	7.5	1.8	0 to 85	10.87
989-EPM240ZM100I8N	EPM240ZM100I8N	TQFP-100	240	192	-8	80	7.5	1.8	-40 to 100	10.87
989-EPM240ZM68C7N	EPM240ZM68C7N	MBGA-100	240	192	-7	54	7.5	1.8	0 to 85	8.62
989-EPM570F100C5N	EPM570F100C5N	FBGA-100	570	440	-5	76	5.4	2.5, 3.3	0 to 85	16.87
989-EPM570F100I5N	EPM570F100I5N	LBGA-100	570	440	-5	76	5.4	2.5, 3.3	-40 to 100	23.62
989-EPM570F256C5N	EPM570F256C5N	FBGA-256	570	440	-5	160	5.4	2.5, 3.3	0 to 85	27.12
989-EPM570F256I5N	EPM570F256I5N	FBGA-256	570	440	-5	160	5.4	2.5, 3.3	-40 to 100	27.12
989-EPM570GF256C5N	EPM570GF256C5N	FBGA-256	570	440	-5	160	5.4	1.8	0 to 85	37.87
989-EPM570GM100C5N	EPM570GM100C5N	BGA-100	570	440	-5	76	5.4	1.8	0 to 70	16.62
989-EPM570GT100C5N	EPM570GT100C5N	TQFP-100	570	440	-5	76	5.4	1.8	0 to 70	16.62
989-EPM570M100C5N	EPM570M100C5N	MBGA-100	570	440	-5	76	5.4	2.5, 3.3	0 to 85	16.62
989-EPM570M100I5N	EPM570M100I5N	BGA-100	570	440	-5	76	5.4	2.5, 3.3	-40 to 85	23.37
989-EPM570T100C3N	EPM570T100C3N	TQFP-100	570	440	-3	76	5.4	2.5, 3.3	0 to 85	33.37
989-EPM570T100C5N	EPM570T100C5N	TQFP-100	570	440	-5	76	5.4	2.5, 3.3	0 to 85	16.62
989-EPM570T100I5N	EPM570T100I5N	TQFP-100	570	440	-5	76	5.4	2.5, 3.3	-40 to 100	23.37
989-EPM570T144C3N	EPM570T144C3N	TQFP-144	570	440	-3	116	5.4	2.5, 3.3	0 to 70	45.12
989-EPM570T144C4N	EPM570T144C4N	TQFP-144	570	440	-4	116	5.4	2.5, 3.3	0 to 70	31.62
989-EPM570T144C5N	EPM570T144C5N	TQFP-100	570	440	-5	116	5.4	2.5, 3.3	0 to 85	22.62
989-EPM570T144I5N	EPM570T144I5N	TQFP-144	570	440	-5	116	5.4	2.5, 3.3	-40 to 100	31.62
989-EPM570ZM100I8N	EPM570ZM100I8N	BGA-100	570	440	-8	76	9	1.8	-40 to 85	24.00
989-EPM1270M256C5N	EPM1270M256C5N	MBGA-256	1270	980	-5	212	6.2	2.5, 3.3	0 to 85	35.25
989-EPM1270T144C3N	EPM1270T144C3N	LQFP-144	1270	980	-3	116	6.2	2.5, 3.3	0 to 85	56.75
989-EPM1270T144C4N	EPM1270T144C4N	TQFP-144	1270	980	-4	116	6.2	2.5, 3.3	0 to 70	39.75
989-EPM1270T144C5N	EPM1270T144C5N	LQFP-144	1270	980	-5	116	6.2	2.5, 3.3	0 to 85	28.37
989-EPM1270T144I5N	EPM1270T144I5N	LQFP-144	1270	980	-5	116	6.2	2.5, 3.3	-40 to 100	39.75
989-EPM2210F256C5N	EPM2210F256C5N	FBGA-256	2210	1700	-5	204	7	2.5, 3.3	0 to 85	39.62
989-EPM2210F256I5N	EPM2210F256I5N	FBGA-256	2210	1700	-5	204	7	2.5, 3.3	-40 to 100	55.50
989-EPM2210F324C3N	EPM2210F324C3N	FBGA-324	2210	1700	-3	272	7	2.5, 3.3	0 to 85	90.50
989-EPM2210GF256C3N	EPM2210GF256C3N	FBGA-256	2210	1700	-3	204	7	1.8	0 to 85	79.37
MAX V										
989-5M40ZE64A5N	5M40ZE64A5N	QFP-64	40	32	-5	54	7.5	1.8	-40 to 125	1.22
989-5M40ZE64C5N	5M40ZE64C5N	EQFP-64	40	32	-5	54	7.5	1.8	0 to 85	.90
989-5M40ZM64C5N	5M40ZM64C5N	BGA-64	40	32	-5	30	7.5	1.8	0 to 70	1.00
989-5M40ZE64I5N	5M40ZE64I5N	QFP-64	40	32	-5	54	7.5	1.8	-40 to 85	1.20
989-5M80ZE64A5N	5M80ZE64A5N	QFP-64	80	64	-5	54	7.5	1.8	-40 to 125	2.50