

XCR Series CPLDs — 3 V and 5 V Fast Zero Power CoolRunner™ Devices (Continued)

XPLA3 CoolRunner CPLD Family (Continued)

Mfr.'s Type			Spd. Grd. PD (ns)	No. of Lds.	No. of Macrocells	No. of Fncn. Blks.	No. of Reg.	No. of I/O
PLCC	QFP	BGA						
—	XCR3128XL-7TQ144C	XCR3128XL-7CS144C	7.5	144	128	8	128	108
—	XCR3128XL-10TQ144C	XCR3128XL-10CS144C	10.0	144	128	8	128	108
—	XCR3256XL-7TQ144C	—	7.5	144	256	16	256	120
—	XCR3256XL-10TQ144C	—	10.0	144	256	16	256	120
—	XCR3256XL-12TQ144C	—	12.0	144	256	16	256	120
—	XCR3256XL-7PQ208C	—	7.5	208	256	16	256	164
—	XCR3256XL-10PQ208C	—	10.0	208	256	16	256	164
—	XCR3256XL-12PQ208C	—	12.0	208	256	16	256	164
—	—	XCR3256XL-7CS280C	7.5	280	256	16	256	164
—	—	XCR3256XL-10CS280C	10.0	280	256	16	256	164
—	—	XCR3256XL-12CS280C	12.0	280	256	16	256	164
—	XCR3384XL-7PQ208C	—	7.5	208	384	24	384	164
—	XCR3384XL-10PQ208C	—	10.0	208	384	24	384	164
—	XCR3384X-12PQ208C	—	12.0	208	384	24	384	164
—	—	XCR3384XL-7FG256C	7.5	256	384	24	384	212
—	—	XCR3384XL-10FG256C	10.0	256	384	24	384	212
—	—	XCR3384X-12FG256C	12.0	256	384	24	384	212
—	—	XCR3384XL-7CS280C	7.5	280	384	24	384	220
—	—	XCR3384XL-10CS280C	10.0	280	384	24	384	220
—	—	XCR3384XL-12CS280C	12.0	280	384	24	384	220

XC9500 and XC9500XL CPLDs — 3.3 V and 5 V In-System Programmable, High Performance

XC9500/XL CMOS CPLDs
Features and Performance

	XC9536/XL	XC9572/XL	XC95108/XL	XC95144/XL	XC95216/XL	XC95288/XL
Output Drive (mA)	24	24	24	24	24	24
UTAG (IEEE 1149.1)	Y	Y	Y	Y	Y	Y
Dedicated Arithmetic	N	N	N	N	N	N
Quiescent Current (mA)	30	65	100	200	200	300
Fastest Speed Grade	–5	–7	–7	–7	–10	–15

XC9500/XL CMOS CPLD Family

Mfr.'s Type				Speed Grade Tpid (ns)	No. of Leads	No. of Macrocells	No. of Function Blocks	No. of Registers	No of I/O
PLCC	QFP	BGA	CSP						
XC95108-7PC84C	XC95108-7PQ100C	—	—	7.5	84/100	108	6	108	69/81
XC95108-10PC84C	XC95108-10PQ100C	—	—	10.0	84/100	108	6	108	69/81
XC95108-15PC84C	XC95108-15PQ100C	—	—	15.0	84/100	108	6	108	69/81
XC95108-20PC84C	XC95108-20PQ100C	—	—	20.0	84/100	108	6	108	69/81
—	XC95108-7TQ100C	—	—	7.5	100	108	6	108	81
—	XC95108-10TQ100C	—	—	10.0	100	108	6	108	81
—	XC95108-15TQ100C	—	—	15.0	100	108	6	108	81
—	XC95108-20TQ100C	—	—	20.0	100	108	6	108	81
—	XC95108-7PQ160C	—	—	7.5	160	108	6	108	108
—	XC95108-10PQ160C	—	—	10.0	160	108	6	108	108
—	XC95108-15PQ160C	—	—	15.0	160	108	6	108	108
—	XC95108-20PQ160C	—	—	20.0	160	108	6	108	108
—	XC95144-7PQ100C	—	—	7.5	100	144	8	144	81
—	XC95144-10PQ100C	—	—	10.0	100	144	8	144	81
—	XC95144-15PQ100C	—	—	15.0	100	144	8	144	81
—	XC95144-20PQ100C	—	—	20.0	100	144	8	144	81
—	XC95144-7PQ160C	—	—	7.5	160	144	8	144	133
—	XC95144-10PQ160C	—	—	10.0	160	144	8	144	133
—	XC95144-15PQ160C	—	—	15.0	160	144	8	144	133
—	XC95144-20PQ160C	—	—	20.0	160	144	8	144	133
—	XC95216-10PQ160C	XC95216-10BG352C	—	10.0	160/352	216	12	216	133/166
—	XC95216-15PQ160C	XC95216-15BG352C	—	15.0	160/352	216	12	216	133/166
—	XC95216-20PQ160C	XC95216-20BG352C	—	20.0	160/352	216	12	216	133/166
—	XC95216-10HQ208C	—	—	10.0	208	216	12	216	166
—	XC95216-15HQ208C	—	—	15.0	208	216	12	216	166
—	XC95216-20HQ208C	—	—	20.0	208	216	12	216	166
—	XC95288-15HQ208C	XC95288-15BG352C	—	15.0	208/352	288	16	288	168/192
—	XC95288-20HQ208C	XC95288-20BG352	—	20.0	208/352	288	16	288	168/192
XC9536-5PC44C	XC9536-5VQ44C	—	XC9536-5CS48C	5.0	44	36	2	36	34
XC9536-7PC44C	XC9536-7VQ44C	—	XC9536-7CS48C	7.5	44	36	2	36	34
XC9536-10PC44C	XC9536-10VQ44C	—	XC9536-10CS48C	10.0	44	36	2	36	34
XC9536-15PC44C	XC9536-15VQ44C	—	—	15.0	44	36	2	36	34
XC9572-7PC44C	XC9572-7PQ100C	—	—	7.0	44/100	72	4	72	34/72
XC9572-10PC44C	XC9572-10PQ100C	—	—	10.0	44/100	72	4	72	34/72
XC9572-15PC44C	XC9572-15PQ100C	—	—	15.0	44/100	72	4	72	34/72
XC9572-7PC84C	XC9572-7TQ100C	—	—	7.5	84/100	72	4	72	69/72
XC9572-10PC84C	XC9572-10TQ100C	—	—	10.0	84/100	72	4	72	69/72
XC9572-15PC84C	XC9572-15TQ100C	—	—	15.0	84/100	72	4	72	69/72
XC9536XL-4PC44C	XC9536XL-4VQ64C	—	XC9536XL-5CS48C	10.0	44/64	36	2	36	34/36
XC9536XL-5PC44C	XC9536XL-5VQ64C	—	XC9536XL-5VQ64C	15.0	44/64/48	36	2	36	34/36
XC9536XL-7PC44C	XC9536XL-7VQ64C	—	XC9536XL-7CS48C	7.5	44/64/48	36	2	36	34/36
XC9536XL-10PC44C	XC9536XL-10VQ64C	—	—	10.0	44/64	36	2	36	34/36
XC9572XL-5PC44C	XC9572XL-5VQ64C	—	—	5.0	44/64	72	4	72	34/52
XC9572XL-7PC44C	XC9572XL-7VQ64C	—	—	7.5	44/64	72	4	72	34/53
XC9572XL-10PC44C	XC9572XL-10VQ64C	—	—	10.0	44/64	72	4	72	34/54
—	XC9572XL-5TQ100C	—	—	5.0	100	72	4	72	72
—	XC9572XL-7TQ100C	—	XC9572XL-7CS48C	7.5	100/48	72	4	72	72/38
—	XC9572XL-10TQ100C	—	XC9572XL-10CS48C	10.0	100/48	72	4	72	72/38
—	XC95144XL-5TQ100C	—	—	5.0	100	144	8	144	81/117
—	XC95144XL-7TQ100C	—	—	7.5	100	144	8	144	81/117
—	XC95144XL-10TQ100C	—	—	10.0	100	144	8	144	81/117
—	XC95144XL-5TQ144C	—	—	5.0	144	144	8	144	117
—	XC95144XL-7TQ144C	—	XC95144XL-7CS144C	7.5	144	144	8	144	117
—	XC95144XL-10TQ144C	—	XC95144XL-10CS144C	10.0	144	144	8	144	117
—	XC95288XL-6TQ144C	XC95288XL-6BG256C	—	6.0	144/256	144	16	288	117/192
—	XC95288XL-7TQ144C	XC95288XL-7BG256C	XC95288XL-7CS280C	7.5	144/256/280	144	16	288	117/192
—	XC95288XL-10TQ144C	XC95288XL-10BG256C	XC95288XL-10CS280C	10.0	144/256/280	144	16	288	117/192
—	XC95288XL-6PQ208C	—	—	6.0	208	208	16	288	168
—	XC95288XL-7PQ208C	—	—	7.5	208	208	16	288	168
—	XC95288XL-10PQ208C	—	—	10.0	208	208	16	288	168