



XC4085XL Pinout Table

March 30, 1998 (Version 1.0)

Product Specification

Pin Locations for XC4085XL Devices

XC4085XL Pad Name	BG432	BG560	PG559
VCC	VCC	VCC*	VCC*
I/O (A8)	D17	A17	AB6
I/O (A9)	A17	B18	AB4
I/O	C17	C18	AA7
I/O	B17	E18	AC1
I/O	-	D18	AA5
I/O	-	A19	AA3
GND	GND*	GND*	GND*
I/O (A19)	C18	C19	Y8
I/O (A18)	D18	D19	AB2
I/O	B18	E19	Y6
I/O	A19	B20	AA1
I/O (A10)	B19	C20	Y4
I/O (A11)	C19	D20	W7
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	D19	A21	W5
I/O	A20	E20	V6
I/O	B20	B21	V4
I/O	C20	C21	Y2
I/O	B21	D21	U3
I/O	D20	B22	U7
I/O	-	E21	V2
I/O	-	C22	U5
GND	GND*	GND*	GND*
I/O	-	D22	T4
I/O	-	A23	U1
I/O	C21	C23	R3
I/O	A22	E22	R5
VCC	VCC	VCC*	VCC*
I/O	B22	B24	T8
I/O	C22	D23	T2
I/O	B23	C24	P4
I/O	A24	A25	R7
GND	GND*	GND*	GND*
I/O	D22	E23	N3
I/O	C23	B25	R1
I/O	B24	D24	N5
I/O	C24	C25	P2
I/O	-	B26	M4
I/O	-	E24	L1
I/O	-	C26	L3
I/O	-	D25	P8
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	-	A27	N7
I/O	-	A28	K2
I/O	D23	E25	M6
I/O	B25	C27	J1
I/O	A26	D26	L5
I/O	C25	B28	H2

XC4085XL Pad Name	BG432	BG560	PG559
I/O (A12)	D24	B29	K4
I/O (A13)	B26	E26	J3
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	A27	C28	L7
I/O	D25	D27	J5
I/O	C26	B30	G1
I/O	B27	C29	H4
I/O	A28	E27	F2
I/O	D26	A31	G5
GND	GND*	GND*	GND*
I/O	C27	D28	H6
I/O	B28	C30	K8
I/O	D27	D29	D2
I/O	B29	E28	J7
I/O (A14)	C28	D30	F4
I/O, GCK8 (A15)	D28	E29	E3
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O, GCK1 (A16)	D29	B33	C1
I/O (A17)	C30	F29	C3
I/O	E28	E30	F6
I/O	E29	D31	A3
I/O (TDI)	D30	F30	H8
I/O (TCK)	D31	C33	D4
GND	GND*	GND*	GND*
I/O	F28	G29	D6
I/O	F29	E31	C5
I/O	E30	D32	E7
I/O	E31	G30	B4
I/O	G28	F31	H10
I/O	G29	H29	G9
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	-	E32	F8
I/O	-	E33	D8
I/O	F30	H30	B6
I/O	F31	G31	E9
I/O	H28	J29	A7
I/O	H29	F33	G11
I/O	G30	G32	H14
I/O	H30	J30	F12
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	-	H31	G13
I/O	-	K29	E11
I/O	-	H32	B8
I/O	-	J31	D10
I/O	J28	K30	A9
I/O	J29	H33	G15

XC4085XL Pinout Table

XC4085XL Pad Name	BG432	BG560	PG559
I/O	H31	L29	B10
I/O	J30	K31	H16
GND	GND*	GND*	GND*
I/O	K28	L30	C9
I/O	K29	K32	E13
I/O (TMS)	K30	J33	A11
I/O	K31	M29	D12
VCC	VCC*	VCC*	VCC*
I/O	-	L31	C11
I/O	-	M30	B14
I/O	L29	L32	G17
I/O	L30	M31	E15
GND	GND*	GND*	GND*
I/O	M30	N29	D14
I/O	M28	L33	A15
I/O	-	N30	C13
I/O	-	N31	B16
I/O	M29	M32	E17
I/O	M31	P29	F18
I/O	N31	P30	A17
I/O	N28	N33	G19
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	N29	P31	D16
I/O	N30	P32	C15
I/O	P30	R29	B18
I/O	P28	R30	H20
I/O	P29	R31	B20
I/O	R31	R33	E19
GND	GND*	GND*	GND*
I/O	R30	T31	D18
I/O	R28	T29	F20
I/O	-	T30	G21
I/O	-	T32	C17
I/O	R29	U32	D20
I/O	T31	U31	E21
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	T30	U29	C21
I/O	T29	U30	F22
I/O	-	U33	A21
I/O	-	V32	D22
I/O	U31	V31	B22
I/O	U30	V29	G23
GND	GND*	GND*	GND*
I/O	U28	V30	E23
I/O	U29	W33	C23
I/O	V30	W31	A23
I/O	V29	W30	D24
I/O	V28	W29	B24
I/O	W31	Y32	H24
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	W30	Y31	F24
I/O	W29	Y30	E25
I/O	-	AA33	B26
I/O	-	Y29	D26
I/O	W28	AA32	A27
I/O	Y31	AA31	G25
I/O	Y30	AA30	B28
I/O	Y29	AB32	C27

XC4085XL Pad Name	BG432	BG560	PG559
GND	GND*	GND*	GND*
I/O	Y28	AA29	F26
I/O	AA30	AB31	E27
I/O	-	AB30	A29
I/O	-	AC33	D28
VCC	VCC*	VCC*	VCC*
I/O	AA29	AC31	G27
I/O	AB31	AB29	B30
I/O	AB30	AD32	C29
I/O	AB29	AC30	E29
GND	GND*	GND*	GND*
I/O	AB28	AD31	D30
I/O	AC30	AE33	A33
I/O	AC29	AC29	C31
I/O	AC28	AE32	B34
I/O	-	AD30	H28
I/O	-	AE31	A35
I/O	-	AF32	G29
I/O	-	AD29	E31
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	-	AF31	D32
I/O	-	AE30	C35
I/O	AD31	AG33	C33
I/O	AD30	AH33	B36
I/O	AD29	AE29	H30
I/O	AD28	AG31	A37
I/O	AE30	AF30	G31
I/O	AE29	AH32	F32
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	AF31	AJ32	E33
I/O	AE28	AF29	D34
I/O	AF30	AH31	B38
I/O	AF29	AG30	G33
I/O	AG31	AK32	A41
I/O	AF28	AJ31	E35
GND	GND*	GND*	GND*
I/O	AG30	AG29	D36
I/O	AG29	AL33	F36
I/O	AH31	AH30	G35
I/O	AG28	AK31	H34
I/O	AH30	AJ30	B40
I/O, GCK2	AJ30	AH29	E37
O (M1)	AH29	AK30	D38
GND	GND*	GND*	GND*
I (M0)	AH28	AJ29	C39
VCC	VCC*	VCC*	VCC*
I (M2)	AJ28	AN32	H36
I/O, GCK3	AK29	AJ28	F38
I/O (HDC)	AH27	AK29	C41
I/O	AK28	AL30	D40
I/O	AJ27	AK28	B42
I/O	AL28	AM31	J37
I/O (LDC)	AH26	AJ27	K36
GND	GND*	GND*	GND*
I/O	AK27	AN31	H38
I/O	AJ26	AL29	D42
I/O	AL27	AK27	G39
I/O	AH25	AL28	C43
I/O	AK26	AJ26	F40

XC4085XL Pad Name	BG432	BG560	PG559
I/O	AL26	AM30	E41
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	AH24	AM29	L37
I/O	AJ25	AK26	J39
I/O	AK25	AL27	F42
I/O	AJ24	AJ25	H40
I/O	AH23	AN29	G43
I/O	AK24	AN28	J41
I/O	-	AK25	H42
I/O	-	AL26	N37
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	-	AJ24	P36
I/O	-	AM27	M38
I/O	-	AM26	J43
I/O	-	AK24	L39
I/O	AL24	AL25	K42
I/O	AH22	AJ23	K40
I/O	AJ23	AN26	L43
I/O	AK23	AL24	L41
GND	GND*	GND*	GND*
I/O	AJ22	AK23	R37
I/O	AK22	AN25	P42
I/O	AL22	AJ22	T36
I/O	AJ21	AL23	N39
VCC	VCC*	VCC*	VCC*
I/O	AH20	AM24	M40
I/O	AK21	AK22	R43
I/O	-	AM23	N41
I/O	-	AJ21	R39
GND	GND*	GND*	GND*
I/O	-	AL22	U37
I/O	-	AN23	T42
I/O	AJ20	AK21	P40
I/O	AH19	AM22	U43
I/O	AK20	AJ20	R41
I/O	AJ19	AL21	V42
I/O	AL20	AN21	U39
I/O	AH18	AK20	V38
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	AK19	AL20	W37
I/O	AJ18	AJ19	T40
I/O	AL19	AM20	Y42
I/O	AK18	AK19	U41
I/O	AH17	AL19	Y36
I/O	AJ17	AN19	V40
GND	GND*	GND*	GND*
I/O	-	AJ18	W39
I/O	-	AK18	AA43
I/O	AK17	AL18	Y38
I/O	AL17	AM18	Y40
I/O	AJ16	AK17	AA37
I/O (INIT)	AK16	AJ17	AA39
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	AL16	AL17	AA41
I/O	AH15	AM17	AB38
I/O	AL15	AN17	AB42
I/O	AJ15	AK16	AB40

XC4085XL Pad Name	BG432	BG560	PG559
I/O	-	AJ16	AC37
I/O	-	AL16	AC39
GND	GND*	GND*	GND*
I/O	AK15	AM16	AD36
I/O	AJ14	AL15	AC41
I/O	AH14	AK15	AD38
I/O	AK14	AJ15	AC43
I/O	AL13	AN15	AD40
I/O	AK13	AM14	AE39
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	AJ13	AL14	AE37
I/O	AH13	AK14	AF40
I/O	AL12	AJ14	AD42
I/O	AK12	AN13	AF42
I/O	AJ12	AM13	AF38
I/O	AK11	AL13	AG39
I/O	-	AK13	AG43
I/O	-	AJ13	AG37
GND	GND*	GND*	GND*
I/O	-	AM12	AH40
I/O	-	AL12	AJ41
I/O	AH12	AK12	AG41
I/O	AJ11	AN11	AK40
VCC	VCC*	VCC*	VCC*
I/O	AL10	AJ12	AJ39
I/O	AK10	AL11	AH42
I/O	AJ10	AK11	AH36
I/O	AK9	AM10	AL39
GND	GND*	GND*	GND*
I/O	AL8	AL10	AJ37
I/O	AH10	AJ11	AJ43
I/O	AJ9	AN9	AM40
I/O	AK8	AK10	AK42
I/O	-	AM9	AN41
I/O	-	AL9	AL41
I/O	-	AJ10	AR41
I/O	-	AM8	AK36
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	-	AK9	AL37
I/O	-	AL8	AN43
I/O	AJ8	AN7	AM38
I/O	AH9	AJ9	AP42
I/O	AK7	AL7	AN39
I/O	AL6	AK8	AR43
I/O	AJ7	AN6	AP40
I/O	AH8	AM6	AT40
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	AK6	AJ8	AN37
I/O	AL5	AL6	AR39
I/O	AH7	AK7	AT42
I/O	AJ6	AM5	BA43
I/O	AK5	AM4	AU43
I/O	AL4	AJ7	AU39
GND	GND*	GND*	GND*
I/O	AH6	AL5	AT38
I/O	AJ5	AK6	AP36
I/O	AK4	AN3	AR37
I/O	AH5	AK5	AV42

XC4085XL Pinout Table

XC4085XL Pad Name	BG432	BG560	PG559
I/O	AK3	AJ6	AV40
I/O, GCK4	AJ4	AL4	AW41
GND	GND*	GND*	GND*
DONE	AH4	AJ5	AY42
VCC	VCC*	VCC*	VCC*
PROGRAM	AH3	AM1	BB42
I/O (D7)	AJ2	AH5	BC41
I/O, GCK5	AG4	AJ4	AV38
I/O	AG3	AK3	BA39
I/O	AH2	AH4	AT36
I/O	AH1	AL1	BB40
I/O	AF4	AG5	AY40
GND	GND*	GND*	GND*
I/O	AF3	AJ3	BA41
I/O	AG2	AK2	BB38
I/O	AG1	AG4	AY38
I/O	AE4	AH3	BC37
I/O	AE3	AF5	AW37
I/O	AF2	AJ2	AT34
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O (D6)	AF1	AJ1	AU35
I/O	AD4	AF4	AV36
I/O	AD3	AG3	BB36
I/O	AE2	AE5	AY36
I/O	AD2	AH1	BC35
I/O	AC4	AF3	AW35
I/O	-	AE4	AU33
I/O	-	AG2	AT30
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	-	AD5	AV32
I/O	-	AF2	AU31
I/O	-	AF1	AW33
I/O	-	AD4	BB34
I/O	AC3	AE3	AY34
I/O	AD1	AC5	BC33
I/O	AC2	AE1	AU29
I/O	AB4	AD3	AT28
GND	GND*	GND*	GND*
I/O	AB3	AC4	BA35
I/O	AB2	AD2	BB30
I/O	AB1	AB5	AW31
I/O	AA3	AC3	AY32
VCC	VCC*	VCC*	VCC*
I/O	-	AB4	BA33
I/O	-	AC1	AU27
I/O (D5)	AA2	AA5	BC29
I/O (CS0)	Y2	AB3	AW29
GND	GND*	GND*	GND*
I/O	Y4	AB2	AY30
I/O	Y3	AA4	BA31
I/O	Y1	AA3	BB28
I/O	W1	Y5	AW27
I/O	-	AA1	BC27
I/O	-	Y4	AV26
I/O	W4	Y3	AU25
I/O	W3	Y2	AY28
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	W2	W5	BA29

XC4085XL Pad Name	BG432	BG560	PG559
I/O	V2	W4	AT24
I/O	V4	W3	BB26
I/O	V3	W1	AW25
I/O	U1	V3	BB24
I/O	U2	V5	AY26
GND	GND*	GND*	GND*
I/O	U4	V4	AV24
I/O	U3	V2	AU23
I/O	-	U2	BA27
I/O	-	U1	BC23
I/O (D4)	T1	U5	AY24
I/O	T2	U4	AW23
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O (D3)	T3	U3	BA23
I/O (RS)	R1	T2	AV22
I/O	-	T3	AY22
I/O	-	T5	BB22
I/O	R2	T4	AU21
I/O	R4	R1	AW21
GND	GND*	GND*	GND*
I/O	R3	R3	BA21
I/O	P2	R4	BC21
I/O	P3	R5	AY20
I/O	P4	P2	BB20
I/O	N1	P3	AT20
I/O	N2	P4	AV20
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	N3	N1	AW19
I/O	N4	P5	AY18
I/O	M1	N2	BB18
I/O	M2	N3	AU19
I/O	-	N4	BC17
I/O	-	M2	BA17
I/O	M3	N5	AV18
I/O	M4	M3	AW17
GND	GND*	GND*	GND*
I/O (D2)	L2	M4	AY16
I/O	L3	L1	BB16
I/O	-	L3	AU17
I/O	-	M5	BA15
VCC	VCC*	VCC*	VCC*
I/O	K1	K2	AW15
I/O	K2	L4	BC15
I/O	K3	J1	AY14
I/O	K4	K3	BA13
GND	GND*	GND*	GND*
I/O	J2	L5	AT16
I/O	J3	J2	BB14
I/O	J4	K4	AU15
I/O	H1	J3	BC11
I/O	-	H2	AW13
I/O	-	K5	BB10
I/O	-	H3	AY12
I/O	-	J4	BA11
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O	H2	G1	AT14
I/O	H3	F1	AU13
I/O	H4	J5	AV12

XC4085XL Pad Name	BG432	BG560	PG559
I/O	G2	G3	BC9
I/O	G3	H4	AW11
I/O	F1	F2	BB8
I/O	-	E2	AY10
I/O	-	H5	AU11
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O (D1)	G4	F3	BA9
I/O (RCLK RDY/BUSY)	F2	G4	AW9
I/O	F3	D2	BC7
I/O	E1	E3	AY8
I/O	F4	G5	AV8
I/O	E2	C1	AT10
GND	GND*	GND*	GND*
I/O	E3	F4	AU9
I/O	D1	D3	BB6
I/O	E4	B3	AW7
I/O	D2	F5	BC3
I/O (D0, DIN)	C2	E4	AY6
I/O, GCK6 (DOUT)	D3	D4	BB4
CCLK	D4	C4	BA5
VCC	VCC*	VCC*	VCC*
O, TDO	C4	E6	BA3
GND	GND*	GND*	GND*
I/O (A0, WS)	B3	D5	AT8
I/O, GCK7 (A1)	D5	A2	AV6
I/O	B4	D6	BB2
I/O	C5	A3	AY4
I/O	A4	E7	AR7
I/O	D6	C5	AP8
GND	GND*	GND*	GND*
I/O	B5	B4	AT6
I/O	C6	D7	AY2
I/O (CS1, A2)	A5	C6	AU5
I/O (A3)	D7	E8	BA1
I/O	B6	B5	AV4
I/O	A6	A5	AW3
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	D8	D8	AN7
I/O	C7	C7	AR5
I/O	B7	E9	AV2
I/O	D9	A6	AT4
I/O	B8	B7	AU1
I/O	A8	D9	AR3
I/O	-	C8	AT2
I/O	-	E10	AL7
VCC	VCC*	VCC*	VCC*
GND	GND*	GND*	GND*
I/O	-	B8	AK8
I/O	-	A8	AM6
I/O	-	D10	AN5
I/O	-	C9	AR1
I/O	D10	E11	AP4
I/O	C9	A9	AN3
I/O	B9	C10	AP2
I/O	C10	D11	AJ7
GND	GND*	GND*	GND*
I/O	B10	B10	AH8

XC4085XL Pad Name	BG432	BG560	PG559
I/O	A10	E12	AL5
I/O	C11	C11	AN1
I/O	D12	B11	AM4
VCC	VCC*	VCC*	VCC*
I/O	B11	D12	AL3
I/O	C12	A11	AJ5
I/O	-	E13	AK2
I/O	-	C12	AG7
GND	GND*	GND*	GND*
I/O	-	B12	AK4
I/O	-	D13	AJ3
I/O	D13	C13	AG5
I/O	B12	E14	AJ1
I/O	C13	A13	AF6
I/O	A12	D14	AH2
I/O	D14	C14	AE7
I/O	B13	B14	AH4
GND	GND*	GND*	GND*
VCC	VCC*	VCC*	VCC*
I/O (A4)	C14	E15	AG3
I/O (A5)	A13	D15	AD8
I/O	B14	C15	AG1
I/O	D15	A15	AF4
I/O (A21)	C15	C16	AE5
I/O (A20)	B15	E16	AD6
GND	GND*	GND*	GND*
I/O	-	D16	AD4
I/O	-	B16	AF2
I/O	A15	B17	AC7
I/O	C16	C17	AD2
I/O (A6)	B16	E17	AC5
I/O (A7)	A16	D17	AC3
GND	GND*	GND*	GND*

6/13/97

Pads labelled GND or VCC* are internally bonded to Ground or VCC planes within the package. They have no direct connection to any specific package pin.

Additional XC4085XL Package Pins

BG560

VCC Pins						
A4	A10	A16	A22	A26	A30	B2
B13	B19	B32	C3	C31	C32	D1
D33	E5	H1	K33	M1	N32	R2
T33	V1	W32	AA2	AB33	AD1	AF33
AK1	AK4	AK33	AL2	AL3	AL31	AM2
AM15	AM21	AM32	AN4	AN8	AN12	AN18
AN24	AN30	-	-	-	-	-
GND Pins						
A7	A12	A14	A18	A20	A24	A29
A32	B1	B6	B9	B15	B23	B27
B31	C2	E1	F32	G2	G33	J32
K1	L2	M33	P1	P33	R32	T1
V33	W2	Y1	Y33	AB1	AC32	AD33
AE2	AG1	AG32	AH2	AJ33	AL32	AM3
AM11	AM19	AM25	AM28	AM33	AM7	AN2
AN5	AN10	AN14	AN16	AN20	AN22	AN27
Not Connected Pins						
A1	A33	AC2	AN1	AN33	-	-

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PG559

VCC Pins						
A13	A31	A43	B2	C7	C19	C25
C37	F14	F30	G3	G7	G37	G41
H12	H18	H26	H32	M8	M36	N1
N43	P6	P38	V8	V36	W3	W41
AE3	AE41	AF8	AF36	AK6	AK38	AL1
AL43	AM8	AM36	AT12	AT18	AT26	AT32
AU3	AU7	AU37	AU41	AV14	AV30	BA7
BA19	BA25	BA37	BC1	BC13	BC31	BC43
GND Pins						
A5	A19	A25	A39	B12	B32	E1
E5	E39	E43	F10	F16	F28	F34
H22	K6	K38	M2	M42	T6	T38
W1	W43	AB8	AB36	AE1	AE43	AH6
AH38	AM2	AM42	AP6	AP38	AT22	AV10
AV16	AV28	AV34	AW1	AW5	AW39	AW43
BB12	BB32	BC5	BC19	BC25	BC39	-

5/8/97

BG432

VCC Pins						
A1	A11	A21	A31	D11	D21	L1
L4	L28	L31	AA1	AA4	AA28	AA31
AH11	AH21	AL1	AL11	AL21	AL31	C3
C29	AJ3	AJ29				
GND Pins						
A2	A3	A7	A9	A14	A18	A23
A25	A29	A30	B1	B2	B30	B31
C1	C31	D16	G1	G31	J1	J31
P1	P31	T4	T28	V1	V31	AC1
AC31	AE1	AE31	AH16	AJ1	AJ31	AK1
AK2	AK30	AK31	AL2	AL3	AL7	AL9
AL14	AL18	AL23	AL25	AL29	AL30	
Not Connected Pins						
C8						

3/3/98

