

Pinout Tables

720						770						C 7 MotherOne		
P	Net in	Type	Bank	FP GA	TE0 600	B /T /L	Pin	Type	Bank	FP GA	TE0 600	B /T /L		
1	VIN	Power input			3.3V	B	1	3.3V	Power input		3.3V	B		
3	VIN	Power input			3.3V	B	3	3.3V	Power input		3.3V	B		
5	VIN	Power input			3.3V	B	5	3.3V	Power input		3.3V	B		
7	NOS_EQ	input			3.3V	B	7	3.3V	Power input		3.3V	B		
9	VCC IO35	I/O Supply			3.3V	B	9	3.3V	Power input		3.3V	B		
11	VCC IO35	I/O Supply			3.3V	B	11	3.3V	Power input		3.3V	B		
13	3.3 VIN	Power input			3.3V	B	13	VCCI O34	I/O Supply	34	3.3V	B		
15	3.3 VIN	Power input			3.3V	B	15	VCCI O34	I/O Supply	34	3.3V	B		
17	MIO 45	MIO 501B9	PHY	B	17	B34_L10	DIFF L3_NIO	34	N1	PHY L10			SD Card	
19	MIO 44	MIO 501E13	PHY	B	19	B34_L100	DIFF L3_PIO	34	N2	PHY L100			SD Card	
21	MIO 43	MIO 501B11	PHY	B	21	B34_L100	DIFF L15_NIO	34	R2	PHY L100			SD Card	
23	MIO 42	MIO 501D8	PHY	B	23	B34_DUP	DIFF L15_PIO	34	P2	PHY DUP			SD Card	
25	MIO 41	MIO 501C8	PHY	B	25	B34_D_TX	DIFF L16_NIO	34	N4	PHY LE			SD Card	
27	MIO 40	MIO 501E14	PHY	B	27	B34_D_RX	DIFF L16_PIO	34	M4	PHY LE			SD Card	
29	GND				GND	B	29	GND			GND	B		

59	B35_L1_3_N	DIF_FIO_CC	35	B20	B	59	B34_L13_NIO_CC	DIFF	34	P5		B													
61	B35_L1_3_P	DIF_FIO_CC	35	B19	B	61	B34_L13_PIO_CC	DIFF	34	N5		B													
63	GND				B	63	GND					B													
65	B35_L1_4_N	DIF_FIO_CC	35	C20	B	65	B34_L21_NIO	DIFF	34	V9		B													
67	B35_L1_4_P	DIF_FIO_CC	35	D20	B	67	B34_L21_PIO	DIFF	34	U9		B													
69	B35_L4_N	DIF_FIO	35	G16	B	69	B34_L6_N	DIFF	34	L5		B													
71	B35_L4_P	DIF_FIO	35	G15	B	71	B34_L6_P	DIFF	34	L6		B													
73	GND				B	73	GND					B													
75	B35_L1_2_N	DIF_FIO_CC	35	C19SIO_CC	B	75	B14_L14_PIO_CC	DIFF	14	T14SIO_CC	B														
77	B35_L1_2_P	DIF_FIO_CC	35	D18SUS_PEND	B	77	B14_L14_NIO_CC	DIFF	14	T15SUS_B	PEND														
79	VB_AT	VB_AT input		VBAT	B	79	VBAT	VBA	T				VBAT												
81	B35_L2_0_N	DIF_FIO_A_DC	35	F19VFS	B	81	B14_L21_NIO	DIFF	14	V11VFS	B														
83	B35_L2_0_P	DIF_FIO_A_DC	35	G19RFU_SE	B	83	B14_L21_PIO	DIFF	14	V10RFU_B	SE														
85	MIO15	MIO500E6	AW_AKE	B		85	B14_L23_NIO	DIFF	14	U13AW_B	AKE											PMOD			
87	MIO0MIO	MIO500G6	CSO_B	B		87	B14_L23_PIO	DIFF	14	T13CSO_B	_B											PMOD			
89	GND				B	89	GND					B													
91	MIO9MIO	MIO500C4	CCLK_B	91	B14_IO25		14	R10CCLK_B				PMOD													
93	MIO11	MIO500B4	MISOB	93	B14_L22_NIO	DIFF	14	V14MISOB				PMOD													
95	MIO10	MIO500G7	MO_SI	B		95	B14_L22_PIO	DIFF	14	U14MO_B	SI											PMOD			
97	MIO13	MIO500A6	MIS_O3	B		97	B14_L16_NIO	DIFF	14	V16MIS_B	O3											PMOD			

1	VCC IO34	I/O Supply	34	VCC IO0	T	1	VCCI O16	I/O Supply	16	VCC IO0	T		VAD J_F MC
3	VCC IO34	I/O Supply	34	VCC IO0	T	3	VCCI O35	I/O Supply	35	VCC IO0	T		VAD J_F MC
5	VCC IO33	I/O Supply	33	VCC IO0	T	5	VCCI O35	I/O Supply	35	VCC IO0	T		VCC IO_P MOD
7	VCC IO13	I/O Supply	13	VCC IO0	T	7	VCCI O15	I/O Supply	15	VCC IO0	T		VAD J_F MC
9	VCC IO13	I/O Supply	13	VCC IO0	T	9	VCCI O15	I/O Supply	15	VCC IO0	T		VAD J_F MC
11	B33 _L7 _P	DIF FIO	33	A A22	T	11	B35_ L7_P	DIFF IO_A DC	35	C4	T		PMOD
13	B33 _L7 _N	DIF FIO	33	A B22	T	13	B35_ L7_N	DIFF IO_A DC	35	B4	T		PMOD
15	B33 _L8 _P	DIF FIO	33	A A21	T	15	B35_ L8_P	DIFF IO_A DC	35	A4	T		PMOD
17	B33 _L8 _N	DIF FIO	33	A B21	T	17	B35_ L8_N	DIFF IO_A DC	35	A3	T		PMOD
19	1.5V	O		1.5V	T	19	B35_ L0	IO	35	F5	1.5V	T	
21	B33 _L1 _1_P _CC	DIF FIO _CC	33	Y19	T	21	B35_ L3_P	DIFF IO_A DC	35	A6	T		PMOD
23	B33 _L1 _1_N _CC	DIF FIO _CC	33	A A19	T	23	B35_ L3_N	DIFF IO_A DC	35	A5	T		PMOD
25	B33 _L1 _2_P	DIF FIO _CC	33	Y18	T	25	B35_ L2_P	DIFF IO_A DC	35	B7	T		PMOD
27	B33 _L1 _2_N _CC	DIF FIO _CC	33	A A18	T	27	B35_ L2_N	DIFF IO_A DC	35	B6	T		PMOD
29	B33 _VR _EF	IO_ VR EF	33	V1 9 /V 15	T	29	GND			T			GND
31	B33 _L1 _7_P	DIF FIO	33	A A17	T	31	B15_ L17_PIO	DIFF	15	K13	T		PMOD

33	B33 _L1 7_N	DIF FIO	33	A B17	T	33	B15_ L17_NIO	DIFF	15	J13	T		PMOD
35	B33 _L1 8_P	DIF FIO	33	A A16	T	35	B15_ L19_PIO	DIFF	15	J14	T		PMOD
37	B33 _L1 8_N	DIF FIO	33	A B16	T	37	B15_ L19_NIO	DIFF	15	H15	T		PMOD
39	GND				T	39	GND			T			
41	B13 _L7 _P	DIF FIO	13	A A12	T	41	B15_ L15_PIO	DIFF	15	H14	T		FMC
43	B13 _L7 _N	DIF FIO	13	A B12	T	43	B15_ L15_NIO	DIFF	15	G14	T		FMC
45	B13 _L8 _P	DIF FIO	13	A A11	T	45	B15_ L1_P	DIFF	15	D14	T		FMC
47	B13 _L8 _N	DIF FIO	13	A B11	T	47	B15_ L1_N	DIFF	15	C14	T		FMC
49	GND				T	49	GND			T			
51	B13 _L1 1_P _CC	DIF FIO	13	A A9	T	51	B15_ L14_PIO_CC	DIFF	15	F15	T		FMC
53	B13 _L1 1_N _CC	DIF FIO	13	A A8	T	53	B15_ L14_NIO_CC	DIFF	15	F16	T		FMC
55	B13 _L9 _P	DIF FIO	13	A B10	T	55	B15_ L20_PIO	DIFF	15	C16	T		FMC
57	B13 _L9 _N	DIF FIO	13	A B9	T	57	B15_ L20_NIO	DIFF	15	C17	T		FMC
59	GND				T	59	GND			T			
61	B13 _L2 0_P	DIF FIO	13	T4	T	61	B15_ L4_P	DIFF	15	B11	T		FMC
63	B13 _L2 0_N	DIF FIO	13	U4	T	63	B15_ L4_N	DIFF	15	A11	T		FMC
65	B13 _L1 7_P	DIF FIO	13	A B7	T	65	B15_ L6_P	DIFF	15	D12	T		FMC
67	B13 _L1 7_N	DIF FIO	13	A B6	T	67	B15_ L6_N	DIFF	15	D13	T		FMC
69	GND				T	69	GND			T			

71	B13 _L1 6_P	DIF FIO	13	A B5	T	71	B15_ L3_P	DIFF IO_A DC	15	C12	T		FMC			
73	B13 _L1 6_N	DIF FIO	13	A B4	T	73	B15_ L3_N	DIFF IO_A DC	15	B12	T		FMC			
75	B13 _L1 8_P	DIF FIO	13	Y4	T	75	B15_ L9_P	DIFF IO_A DC	15	A13	T		FMC			
77	B13 _L1 8_N	DIF FIO	13	A A4	T	77	B15_ L9_N	DIFF IO_A DC	15	A14	T		FMC			
79	GND				T	79	GND				T					
81	B13 _L1 5_P	DIF FIO	13	A B2	T	81	B15_ L2_P	DIFF IO_A DC	15	B13	T		FMC			
83	B13 _L1 5_N	DIF FIO	13	A B1	T	83	B15_ L2_N	DIFF IO_A DC	15	B14	T		FMC			
85	B13 _L2 1_P	DIF FIO	13	V5	T	85	B15_ L8_P	DIFF IO_A DC	15	A15	T		FMC			
87	B13 _L2 1_N	DIF FIO	13	V4	T	87	B15_ L8_N	DIFF IO_A DC	15	A16	T		FMC			
89	B13 _IO _IO25	IO	13	U7	T	89	GND				T					
91	VRE O F_JT 3.3 AG V		VCC	T	_AUX	91	VRE F_JT AG	O 3.3 V		VCC	T	_AUX				
93	TMS	JTAG0			T	93	TMS	JTAG0			T		FTDI			
95	TDI	JTAG0			T	95	TDI	JTAG0			T		FTDI			
97	TDO	JTAG0			T	97	TDO	JTAG0			T		FTDI			
99	TCK	JTAG0			T	99	TCK	JTAG0			T		FTDI			
					T					T						
2	VIN	Power input			3.3V	T	2	3.3V	Power input		3.3V	T				
4	VIN	Power input			3.3V	T	4	3.3V	Power input		3.3V	T				
6	VIN	Power input			3.3V	T	6	3.3V	Power input		3.3V	T				
8	VIN	Power input			3.3V	T	8	3.3V	Power input		3.3V	T				
10	3.3V	O			3.3V	T	10	3.3V	Power input		3.3V	T				

48	B13 _L1 2_N	DIF FIO _CC	13	Y8		T	48	B15_ L12_NIO_CC	DIFF 15	C15		T		FMC		
50	GND					T	50	GND				T				
52	B13 _L1 4_P	DIF FIO _CC	13	A	A7	T	52	B15_ L11_PIO_CC	DIFF 15	E15		T		FMC		
54	B13 _L1 4_N	DIF FIO _CC	13	A	A6	T	54	B15_ L11_NIO_CC	DIFF 15	E16		T		FMC		
56	B13 _L1 3_P	DIF FIO _CC	13	Y6		T	56	B15_ L13_PIO_CC	DIFF 15	H16		T		FMC		
58	B13 _L1 3_N	DIF FIO _CC	13	Y5		T	58	B15_ L13_NIO_CC	DIFF 15	G16		T		FMC		
60	GND					T	60	GND				T				
62	B13 _L4 _P	DIF FIO	13	V12		T	62	B15_ L24_PIO	DIFF 15	K15		T		FMC		
64	B13 _L4 _N	DIF FIO	13	W	12	T	64	B15_ L24_NIO	DIFF 15	J15		T		FMC		
66	B13 _L3 _P	DIF FIO	13	W	11	T	66	B15_ L16_PIO	DIFF 15	E17		T		FMC		
68	B13 _L3 _N	DIF FIO	13	W	10	T	68	B15_ L16_NIO	DIFF 15	D17		T		FMC		
70	GND					T	70	GND				T				
72	B13 _L1 0_P	DIF FIO	13	Y11		T	72	B15_ L21_PIO	DIFF 15	E18		T		FMC		
74	B13 _L1 0_N	DIF FIO	13	Y10		T	74	B15_ L21_NIO	DIFF 15	D18		T		FMC		
76	B13 _L2 _P	DIF FIO	13	V8		T	76	B15_ L22_PIO	DIFF 15	G18		T		FMC		
78	B13 _L2 _N	DIF FIO	13	W8		T	78	B15_ L22_NIO	DIFF 15	F18		T		FMC		
80	GND					T	80	GND				T				
82	B13 _L2 3_P	DIF FIO	13	V7		T	82	B15_ L18_PIO	DIFF 15	H17		T		FMC		
84	B13 _L2 3_N	DIF FIO	13	W7		T	84	B15_ L18_NIO	DIFF 15	G17		T		FMC		

86	B13 _L2 4_P	DIF FIO	13	W6		T	86	B15_ L23_PIO	DIFF	15	J17		T			FMC		
88	B13 _L2 4_N	DIF FIO	13	W5		T	88	B15_ L23_NIO	DIFF	15	J18		T			FMC		
90	GND					T	90	GND				T						
92	B13 _L1 9_P	DIF FIO	13	R6		T	92	B15_ L7_P	DIFF	15	B16		T			FMC		
94	B13 _L1 9_N	DIF FIO	13	T6		T	94	B15_ L7_N	DIFF	15	B17		T			FMC		
96	B13 _L2 2_P	DIF FIO	13	U6		T	96	B15_ L10_PIO_A	DIFF	15	B18		T			FMC		
98	B13 _L2 2_N	DIF FIO	13	U5		T	98	B15_ L10_NIO_A	DIFF	15	A18		T			FMC		
1	B13 00_IO0	IO	13	R7		T	1	B15_ 00IO0	IO	15	G13		T					
LEFT																		
1	SOU T_N	SG MII -TX			ETH PHY SG MII	L	1	SOU T_P	SGM II_TX	-		ETH PHY SG MII						
3	SOU T_P	SG MII -TX			ETH PHY SG MII	L	3	SOU T_N	SGM II_TX	-		ETH PHY SG MII						
5	GND					L	5	GND				L						
7	B34 _L7 _P	DIF FIO	34	J18		L	7	MGT _TX0 _P	MGT _TX	115F2		L						
9	B34 _L7 _N	DIF FIO	34	K18		L	9	MGT _TX0 _N	MGT _TX	115F1		L						
11	GND					L	11	GND				L						
13	B34 _L2 _P	DIF FIO	34	J16		L	13	MGT _TX1 _P	MGT _TX	115D2		L						
15	B34 _L2 _N	DIF FIO	34	J17		L	15	MGT _TX1 _N	MGT _TX	115D1		L						
17	GND					L	17	GND				L						
19	B34 _L4 _P	DIF FIO	34	L17		L	19	MGT _TX2 _P	MGT _TX	115B2		L						

21	B34 _L4 _N	DIF FIO	34	M 17	L	21	MGT _TX2 _N	MGT _TX	115B1	L		
23	GND				L	23	GND			L		
25	B34 _L5 _P	DIF FIO	34	N17	L	25	MGT _TX3 _P	MGT _TX	115A4	L		
27	B34 _L5 _N	DIF FIO	34	N18	L	27	MGT _TX3 _N	MGT _TX	115A3	L		
29	GND				L	29	GND			L		
31	B34 _L1 _2_P _CC	DIF FIO	34	L18	L	31	MGT _CL K0_P	MGT _CLK	115D6	L	FMC	
33	B34 _L1 _2_N _CC	DIF FIO	34	L19	L	33	MGT _CL K0_N	MGT _CLK	115D5	L	FMC	
35	GND				L	35	GND			L		
37	B34 _L8 _P	DIF FIO	34	J21	L	37		DIFF IO_CC		L	FMC	
39	B34 _L8 _N	DIF FIO	34	J22	L	39		DIFF IO_CC		L	FMC	
41	B34 _L9 _P	DIF FIO	34	J20	L	41	GND			L	FMC	
43	B34 _L9 _N	DIF FIO	34	K21	L	43		DIFF IO		L	FMC	
45	GND				L	45		DIFF IO		L		
47	OTG D+	DIF FIO		USB	L	47	GND			L	USB	
49	OTG D-	DIF FIO		USB	L	49		DIFF IO_A DC		L	USB	
51	OTG I ID			USB	L	51		DIFF IO_A DC		L	USB	
53	VB_O US_V_EN			USB	L	53	GND			L	USB	
55	USB I _VB_US			USB	L	55		DIFF IO_A DC		L	USB	
57	B34 _L2 _2_P	DIF FIO	34	R19	L	57		DIFF IO_A DC		L	FMC	

59	B34	DIF	34	T19		L	59	RES			L			FMC					
	_L2	FIO					ERV												
	2_N					ED													
2	SIN	SG				ETH L	2	SIN_PSGM		-	ETH L								
	_N	MII				PHY S G		II_RX			PHY S G								
	_RX					MII					MII								
4	SIN	SG				ETH L	4	SIN_NSGM		-	ETH L								
	_P	MII				PHY S G		II_RX			PHY S G								
	_RX					MII					MII								
6	GND						L	6	GND					L					
8	B34	DIF	34	J15		L	8	MGT _RX0	MGT _RX	115G4			L						
	_L1	FIO						P											
	_P																		
10	B34	DIF	34	K15		L	10	MGT _RX0	MGT _RX	115G3			L						
	_L1	FIO						N											
	_N																		
12	GND						L	12	GND					L					
14	B34	DIF	34	P20		L	14	MGT _RX1	MGT _RX	115E4			L						
	_L1	FIO						P											
	8_P																		
16	B34	DIF	34	P21		L	16	MGT _RX1	MGT _RX	115E3			L						
	_L1	FIO						N											
	8_N																		
18	GND						L	18	GND					L					
20	B34	DIF	34	P17		L	20	MGT _RX2	MGT _RX	115C4			L						
	_L2	FIO						P											
	0_P	_CC																	
22	B34	DIF	34	P18		L	22	MGT _RX2	MGT _RX	115C3			L						
	_L2	FIO						N											
	0_N	_CC																	
24	GND						L	24	GND					L					
26	B34	DIF	34	L21		L	26	MGT _RX3	MGT _RX	115B6			L						
	_L1	FIO						P											
	0_P																		
28	B34	DIF	34	L22		L	28	MGT _RX3	MGT _RX	115B5			L						
	_L1	FIO						N											
	0_N																		
30	GND						L	30	GND					L					
32	B34	DIF	34	M19		L	32		DIFF IO_CC			L			FMC				
	_L1	FIO																	
	3_P	_CC																	
34	B34	DIF	34	M20		L	34		DIFF IO_CC			L			FMC				
	_L1	FIO																	
	3_N	_CC																	
36	GND						L	36	GND					L					

38	B34 _L2 1_P	DIF FIO	34	T16	L	38		DIFF IO_CC		L			FMC							
40	B34 _L2 1_N	DIF FIO	34	T17	L	40		DIFF IO_CC		L			FMC							
42	B34 _L1 5_P	DIF FIO	34	M 21	L	42	GND			L			FMC							
44	B34 _L1 5_N	DIF FIO	34	M 22	L	44		DIFF IO		L			FMC							
46	GND				L	46		DIFF IO		L										
48	B34 _L1 7_P	DIF FIO	34	R20	L	48	GND			L			FMC							
50	B34 _L1 7_N	DIF FIO	34	R21	L	50		DIFF IO_A DC		L			FMC							
52	B34 _L2 3_P	DIF FIO	34	R18	L	52		DIFF IO_A DC		L			FMC							
54	B34 _L2 3_N	DIF FIO	34	T18	L	54	GND			L			FMC							
56	B34 _VR EF	IO_ VR EF	34	M 16 /P15	L	56		DIFF IO_A DC		L			VRE F_F MC							
58	B34 _L1 4_P	DIF FIO _CC	34	N19	L	58		DIFF IO_A DC		L			FMC							
60	B34 _L1 4_N	DIF FIO _CC	34	N20	L	60	RES ERV ED			L			FMC							