

Command module Pin Out for LPC2368DM100

LPC2368BDM100		Comment	RS-EDP-BASE BOARD - mapping
Pin	Name		Name
1	TDO	JTAG interface on LPC module	
2	TDI	JTAG interface on LPC module	
3	TMS	JTAG interface on LPC module	
4	#TRST	JTAG interface on LPC module	
5	TCK	JTAG interface on LPC module	
6	P0[26]/AD0[3]/AOUT/RXD3	3 link options	AN3
		3 link options	AN11
		3 link options	CPU_DAC00_GPIO17
7	P0[25]/AD0[2]/I2SRX_SDA/TXD3	2 link options	AN2
		2 link options	AN10
8	P0[24]/AD0[1]/I2SRX_WS/CAP3[1]	2 link options	AN1
		2 link options	AN9
9	P0[23]/AD0[0]/I2SRX_CLK/CAP3[0]	2 link options	AN0
		2 link options	AN8
10	Vdda	2 link options	AN_REF
		2 link options	Vcc_CM
11	Vssa		VAGND
		Jumper option to SGND	SGND
12	VREFP	2 link options	AN_REF
		2 link options	Vcc_CM
13	Vdd(reg)(3V3)		3.3V
14	#RSTOUT		#RESOUT
15	Vss		VAGND
		Jumper option to SGND	SGND
16	RTCX1	32KHz clock on LPC module	
17	RESET		#RESIN
18	STCX2	32KHz clock on LPC module	
19	VBAT	2 link options	3V BAT
		2 link options	3.3V
20	P1[31]/SCK1/AD0[5]	2 link options	AN5
		2 link options	AN13
21	P1[30]/Vbus/AD0[4]	2 link options	AN4
		2 link options	AN12
22	XTAL1	Xtal on module	
23	XTAL2	Xtal on module	
24	P0[28]/SCL0		CNTRL_I2C_SCL
25	P0[27]/SDA0		CNTRL_I2C_SDA
26	P3[26]/MAT0[1]/PWM1[3]		EVG1_GPIO42
27	P3[25]/MAT0[0]/PWM1[2]	2 link options	EVG0_GPIO40
		2 Link options - User LED1	
28	Vdd(3V3)		3.3V
29	P0[29]/USB_D+		USB_DEV_D+
30	P0[30]/USB_D-		USB_DEV_D-
31	Vss		SGND
32	P1[18]/USB_UP_LED/PWM1[1]/CAP1[0]	3 link options	EVG5_GPIO50
		3 link options	EVG8_GPIO56
		3 link options	EVG0_GPIO40
33	P1[19]/MC0A/CAP1[1]	2 link options	MOTORP0H
		2 link options	EVG9_GPIO57
34	P1[20]/PWM1[2]/SCK0	2 link options	MOTORH0_ENC0
		2 link options	EVG10_GPIO58
35	P1[21]/PWM1[3]/SSEL0	2 link options	EMG_TRAP
		2 link options	EVG11_GPIO59
36	P1[22]/MAT1[0]	2 link options	MOTORP0L
		2 link options	EVG12_GPIO60
37	P1[23]/PWM1[4]/MISO0	2 link options	MOTORH1_ENC1
		2 link options	EVG13_GPIO61
38	P1[24]/PWM1[5]/MOSI0	2 link options	MOTORH2_ENC2
		2 link options	EVG14_GPIO62

39	P1[25]/MAT1[1]	2 link options	MOTORP1H
		2 link options	EVG15_GPIO63
40	P1[26]/PWM1[6]/CAP0[0]	2 link options	MOTORP1L
		2 link options	EVG16_GPIO64
41	Vss		SGND
42	Vdd(reg)(3V3)		3.3V
43	P1[27]/CAP0[1]		EVM5_GPIO47
44	P1[28]/PCAP1[0]/MAT0[0]	2 link options	MOTORP2H
		2 link options	EVG17_GPIO65
45	P1[29]/PCAP1[1]/MAT0[1]	2 link options	MOTORP2L
		2 link options	EVG18_GPIO66
46	P0[0]/RD1/TXD3/SDA1	3 link options	CAN0_TX
		3 link options	CAN0_TX_LOCAL
		3 link options	I2C_GEN0_SDA
47	P0[1]/TD1/RXD3/SCL1	3 link options	CAN0_RX
		3 link options	CAN0_RX_LOCAL
		3 link options	I2C_GEN0_SCL
48	P0[10]/TXD2/SDA2/MAT3[0]	2 link options	GPIO0
		2 link options	EVG6_GPIO52
49	P0[11]/RXD2/SCL2/MAT3[1]	2 link options	GPIO1
		2 link options	EVG7_GPIO54
50	P2[13]/#EINT3/MCIDAT3/I2STX_SDA		GPIO8_MCI_DAT3
51	P2[12]/#EINT2/MCIDAT2/I2STX_WS		GPIO6_MCI_DAT2
52	P2[11]/#EINT1/MCIDATA1/I2STX_CLK		GPIO4_MCI_DAT1
53	P2[10]/#EINT0	2 link options	IRQ_GPIO16_CNTRL_I2C_INT
		2 link options	IRQ_GPIO18_I2C_GEN0_INT
54	Vdd(3V3)		3.3V
55	Vss		SGND
56	P0[22]/RTS1/MCIDATA0/TD1	2 link options	GPIO2_MCI_DAT0
		2 Link options	EVM6_GPIO49
57	P0[21]/RI1/MCIPWR/RD1	2 link options	GPIO14_MCI_PWR
		2 Link options	EVM4_GPIO45
58	P0[20]/DTR1/MCICMD/SCL1	2 link options	GPIO12_MCI_CMD
		2 Link options	EVM3_GPIO43
59	P0[19]/DSR1/MCICLK/SDA1	2 link options	GPIO10_MCI_CLK
		2 Link options	EVM2_GPIO41_CAPADC
60	P0[18]/DCD1/MOSI0/MOSI		CNTRL_SPI_MTSR
61	P0[17]/CTS1/MISO0/MISO		CNTRL_SPI_MRST
62	P0[15]/TXD1/SCK0/SCK		CNTRL_SPI_CLK
63	P0[16]/RXD1/SSEL0/SSEL		CNTRL_SPI_#CS_NSS
64	P2[9]/USB_CONNECT/RXD2/EXTINO	2 link options	ASC1_RX_TTL
		2 link options	EVM10_GPIO68_ASC0_CTS
65	P2[8]/TD2/TXD2/TRACEPKT3	2 link options	ASC1_TX_TTL
		2 link options	CAN1_TX
66	P2[7]/RD2/RTS1/TRACEPKT2	2 link options	ASC1_TX_TTL_ASC0_DTR
		2 link options	CAN1_RX
67	P2[6]/PCAP1[0]/RI1/TRACEPKT1	2 link option	MOTOR_TCO_FB
		2 link options	User LED0
68	P2[5]/PWM1[6]/DTR1/TRACEPKT0	2 link option	EVG4_GPIO48
		2 link option	EVG19_GPIO67
69	P2[4]/PWM1[5]/DSR1/TRACESYNC	2 link option	CPU_DAC01_GPIO19
		2 link option	EVG3_GPIO46
70	P2[3]/PWM1[4]/DCD1/PIPESTAT2	2 link option	CPU_DAC00_GPIO17
		2 link option	EVG2_GPIO44
71	Vdd(3V3)		3.3V
72	Vss		SGND
73	P2[2]/PWM1[3]/CTS1/PIPESTAT1		EVM9_GPIO55
74	P2[1]/PWM1[2]/RXD1/PIPESTAT0	2 link options	ASC1_RX_TTL
		2 Link options	EVM8_GPIO53
75	P2[0]/PWM1[1]/TXD1/TRACECLK	2 link options	ASC1_TX_TTL
		2 Link options	EVM7_GPIO51
76	P0[9]/I2STX_SDA/MOSI1/MAT2[3]	Local_SD_SPI_MOSI	
77	P0[8]/I2STX_WS/MISO1/MAT2[2]	Local_SD_SPI_MISO	
78	P0[7]/I2STX_CLK/SCK1/MAT2[1]	Local_SD_SPICLK	
79	P0[6]/I2SRX_SDA/SSEL1/MAT2[0]	Local_SD_CS_SD	
80	P0[5]/I2SRX_WS/TD2/CAP2[1]	3 link options	GPIO9_I2S_RX_WS
		3 link options	EVM1_GPIO23

		3 link options	CPU_DAC00_GPIO17
81	P0[4]/I2SRX_CLK/RD2/CAP2[0]	2 link option	GPIO7_I2S_RX_CLK
		2 Link options	EVM0_GPIO21
82	P4[28]/MAT2[0]/TXD3	USB Debug ports FTDI chip	
83	Vss		SGND
84	Vdd(reg)(3V3)		3.3V
85	P4[29]/MAT2[1]/RXD3	USB Debug ports FTDI chip	
86	P1[17]/ENET_MDIO	Ethernet PHY chip	
87	P1[16]/ENET_MDC	Ethernet PHY chip	
88	P1[15]/ENET_REF_CLK	Ethernet PHY chip	
89	P1[14]/ENET_RX_ER	Ethernet PHY chip	
90	P1[10]/ENET_RXD1	Ethernet PHY chip	
91	P1[9]/ENET_RXD0	Ethernet PHY chip	
92	P1[8]/ENET_CRS	Ethernet PHY chip	
93	P1[4]/ENET_TX_EN	Ethernet PHY chip	
94	P1[1]/ENET_TXD1	Ethernet PHY chip	
95	P1[0]/ENET_TXD0	Ethernet PHY chip	
96	Vdd(3V3)		3.3V
97	Vss		SGND
98	P0[2]/TXD0	3 Link options	ASC0_TX_TTL
		3 link options	AN7
		3 link options	AN15
99	P0[3]/RXD0	3 Link options	ASC0_RX_TTL
		3 link options	AN6
		3 link options	AN14
100	RTCK	JTAG interface on LPC module	

Resources Used/Available
3.3V
3V BAT
Vcc_CM
AN_REF
VAGND
#RESIN
#RESOUT
SGND
VAGND
AN0
AN1
AN2
AN3
AN4
AN5
AN6
AN7
AN8
AN9
AN10
AN11
AN12
AN13
AN14
AN15
ASCO_RX_TTL
ASCO_TX_TTL
ASC1_RX_TTL
ASC1_TX_TTL
ASC1_TX_TTL_ASC0_DTR
CAN0_RX
CAN0_TX
CAN1_RX
CAN1_TX
CAN0H
CAN0L
CNTRL_I2C_SCL
CNTRL_I2C_SDA
CNTRL_SPI_#CS_NSS
CNTRL_SPI_CLK
CNTRL_SPI_MRST
CNTRL_SPI_MTSR
CPU_DAC01_GPIO19
CPU_DAC00_GPIO17
CPU_DAC00_GPIO17
EVG0_GPIO40
EVG1_GPIO42
EVG2_GPIO44
EVG3_GPIO46
EVG4_GPIO48
EVG5_GPIO50
EVG6_GPIO52
EVG7_GPIO54
EVG8_GPIO56
EVG9_GPIO57
EVG10_GPIO58
EVG11_GPIO59
EVG12_GPIO60
EVG13_GPIO61
EVG14_GPIO62
EVG15_GPIO63
EVG16_GPIO64

Pin	Alphabetic Listing of Available I/O
14	#RSTOUT
4	#TRST
46	P0[0]/RD1/TXD3/SDA1
47	P0[1]/TD1/RXD3/SCL1
98	P0[2]/TXD0
99	P0[3]/RXD0
81	P0[4]/I2SRX_CLK/RD2/CAP2[0]
80	P0[5]/I2SRX_WS/TD2/CAP2[1]
79	P0[6]/I2SRX_SDA/SSEL1/MAT2[0]
78	P0[7]/I2STX_CLK/SCK1/MAT2[1]
77	P0[8]/I2STX_WS/MISO1/MAT2[2]
76	P0[9]/I2STX_SDA/MOSI1/MAT2[3]
48	P0[10]/TXD2/SDA2/MAT3[0]
49	P0[11]/RXD2/SCL2/MAT3[1]
62	P0[15]/TXD1/SCK0/SCK
63	P0[16]/RXD1/SSELO/SSEL
61	P0[17]/CTS1/MISO0/MISO
60	P0[18]/DCD1/MOSIO/MOSI
59	P0[19]/DSR1/MCICLK/SDA1
58	P0[20]/DTR1/MCICMD/SCL1
57	P0[21]/RI1/MCIPWR/RD1
56	P0[22]/RTS1/MCIDATA0/TD1
9	P0[23]/AD0[0]/I2SRX_CLK/CAP3[0]
8	P0[24]/AD0[1]/I2SRX_WS/CAP3[1]
7	P0[25]/AD0[2]/I2SRX_SDA/TXD3
6	P0[26]/AD0[3]/AOUT/RXD3
25	P0[27]/SDA0
24	P0[28]/SCL0
29	P0[29]/USB_D+
30	P0[30]/USB_D-
95	P1[0]/ENET_TXD0
94	P1[1]/ENET_TXD1
93	P1[4]/ENET_TX_EN
92	P1[8]/ENET_CRS
91	P1[9]/ENET_RXD0
90	P1[10]/ENET_RXD1
89	P1[14]/ENET_RX_ER
88	P1[15]/ENET_REF_CLK
87	P1[16]/ENET_MDC
86	P1[17]/ENET_MDIO
32	P1[18]/USB_UP_LED/PWM1[1]/CAP1[0]
33	P1[19]/MCOA/CAP1[1]
34	P1[20]/PWM1[2]/SCK0
35	P1[21]/PWM1[3]/SSELO
36	P1[22]/MAT1[0]
37	P1[23]/PWM1[4]/MISO0
38	P1[24]/PWM1[5]/MOSIO
39	P1[25]/MAT1[1]
40	P1[26]/PWM1[6]/CAPO[0]
43	P1[27]/CAPO[1]
44	P1[28]/PCAP1[0]/MAT0[0]
45	P1[29]/PCAP1[1]/MAT0[1]
21	P1[30]/Vbus/AD0[4]
20	P1[31]/SCK1/AD0[5]
75	P2[0]/PWM1[1]/TXD1/TRACECLK
74	P2[1]/PWM1[2]/RXD1/PIPESTAT0
73	P2[2]/PWM1[3]/CTS1/PIPESTAT1
70	P2[3]/PWM1[4]/DCD1/PIPESTAT2
69	P2[4]/PWM1[5]/DSR1/TRACESYNC
68	P2[5]/PWM1[6]/DTR1/TRACEPKT0
67	P2[6]/PCAP1[0]/RI1/TRACEPKT1
66	P2[7]/RD2/RTS1/TRACEPKT2

EVG17_GPIO65
EVG18_GPIO66
EVG19_GPIO67
EVM0_GPIO21
EVM1_GPIO23
EVM2_GPIO41_CAPADC
EVM3_GPIO43
EVM4_GPIO45
EVM5_GPIO47
EVM6_GPIO49
EVM7_GPIO51
EVM8_GPIO53
EVM9_GPIO55
EVM10_GPIO68_ASC0_CTS
GPIO0
GPIO1
GPIO7_I2S_RX_CLK
GPIO9_I2S_RX_WS
GPIO10_MCI_CLK
GPIO12_MCI_CMD
GPIO14_MCI_PWR
GPIO2_MCI_DAT0
GPIO4_MCI_DAT1
GPIO6_MCI_DAT2
GPIO8_MCI_DAT3
I2C_GEN0_SCL
I2C_GEN0_SDA
IRQ_GPIO16_CNTRL_I2C_INT
IRQ_GPIO18_I2C_GEN0_INT
MOTORP0H
MOTORP0L
MOTORP1H
MOTORP1L
MOTORP2H
MOTORP2L
MOTORH0_ENC0
MOTORH1_ENC1
MOTORH2_ENC2
EMG_TRAP
MOTOR_TCO_FB
USB_DEV_D-
USB_DEV_D+

65	P2[8]/TD2/TXD2/TRACEPKT3
64	P2[9]/USB_CONNECT/RXD2/EXTINO
53	P2[10]/#EINT0
52	P2[11]/#EINT1/MCIDATA1/I2STX_CLK
51	P2[12]/#EINT2/MCIDAT2/I2STX_WS
50	P2[13]/#EINT3/MCIDAT3/I2STX_SDA
27	P3[25]/MAT0[0]/PWM1[2]
26	P3[26]/MAT0[1]/PWM1[3]
82	P4[28]/MAT2[0]/TXD3
85	P4[29]/MAT2[1]/RXD3
17	RESET
100	RTCK
16	RTCX1
18	STCX2
5	TCK
2	TDI
1	TDO
3	TMS
19	VBAT
28	Vdd(3V3)
54	Vdd(3V3)
71	Vdd(3V3)
96	Vdd(3V3)
13	Vdd(reg)(3V3)
42	Vdd(reg)(3V3)
84	Vdd(reg)(3V3)
10	Vdda
12	VREFP
15	Vss
31	Vss
41	Vss
55	Vss
72	Vss
83	Vss
97	Vss
11	Vssa
22	XTAL1
23	XTAL2