QuickUSB Adapter Board Pinout
Rev   B
Date   3/16/2007

*Quick*USB™

Bitwise™
SYSTEMS

Connector	**J2**		**40-Pin 0.1" Dual Row Header**				
Pin	**Name**	**Dir**	**Description**	**Pin**	**Name**	**Dir**	**Description**
1	+5V	N/A	Unregulated +5V from the USB bus (300mA total)	2	+5V	N/A	Unregulated +5V from the USB bus (300mA total)
3	PA0	I/O	FX2 Port A, Bit 0 / nSS2	4	RESET_B	OD	FX2 Reset, Active low.
5	PA1	I/O	FX2 Port A, Bit 1 / nSS3	6	CLKOUT	Output	FX2 48MHz CPU clock
7	PA2	I/O	FX2 Port A, Bit 2 / nSS4 / SLOE	8	IFCLK	Output	FX2 48MHz GPIO clock
9	PA3	I/O	FX2 Port A, Bit 3 / nSS5	10	INT4	Input	FX2 INT4 IRQ. Active high, edge sensitive
11	PA4	I/O	FX2 Port A, Bit 4 / nSS6 / FIFOADR0	12	RXD_0	Input	FX2 Serial Port 0 RS-232 RxD
13	PA5	I/O	FX2 Port A, Bit 5 / nSS7 / FIFOADR1	14	TXD_0	Output	FX2 Serial Port 0 RS-232 TxD
15	PA6	I/O	FX2 Port A, Bit 6 / nSS8 / PKTEND	16	TXD_1	Output	FX2 Serial Port 1 RS-232 TxD
17	PA7	I/O	FX2 Port A, Bit 7 / nSS9 / FLAGD (SLCS)	18	RXD_1	Input	FX2 Serial Port 1 RS-232 RxD
19	PB0	I/O	FX2 Port B, Bit 0 / FD0	20	CTL0	Output	FX2 GPIF CTL 0 / CMD_DATA / FLAGA (PF)
21	PB1	I/O	FX2 Port B, Bit 1 / FD1	22	CTL1	Output	FX2 GPIF CTL 1 / REN / FLAGB (FULL)
23	PB2	I/O	FX2 Port B, Bit 2 / FD2	24	CTL2	Output	FX2 GPIF CTL 2 / WEN / FLAGC (EMPTY)
25	PB3	I/O	FX2 Port B, Bit 3 / FD3	26	CTL3	Output	FX2 GPIF CTL 3 / nREN
27	PB4	I/O	FX2 Port B, Bit 4 / FD4	28	CTL4	Output	FX2 GPIF CTL 4 / nWEN
29	PB5	I/O	FX2 Port B, Bit 5 / FD5	30	CTL5	Output	FX2 GPIF CTL 5 / AEN
31	PB6	I/O	FX2 Port B, Bit 6 / FD6	32	RXD0	Input	FX2 Serial Port 0 TTL RxD (Do not use if U1 is populated)
33	PB7	I/O	FX2 Port B, Bit 7 / FD7	34	TXD0	Output	FX2 Serial Port 0 TTL TxD (Do not use if U1 is populated)
35	T0	Input	FX2 Input for Timer0 (Currently not used)	36	T1	Input	FX2 Input for Timer1 (Currently not used)
37	NC	N/A	No Connect	38	NC	N/A	No Connect
39	GND	N/A	Ground	40	GND	N/A	Ground

Connector	**J3**		**40-Pin 0.1" Dual Row Header**				
Pin	**Name**	**Dir**	**Description**	**Pin**	**Name**	**Dir**	**Description**
1	+5V	N/A	Unregulated +5V from the USB bus (300mA total)	2	+5V	N/A	Unregulated +5V from the USB bus (300mA total)
3	PC0	I/O	FX2 Port C, Bit 0 / GPIFADR0	4	RDY0	Input	FX2 GPIF input signal 0 / SLRD
5	PC1	I/O	FX2 Port C, Bit 1 / GPIFADR1	6	RDY1	Input	FX2 GPIF input signal 1 / SLWR
7	PC2	I/O	FX2 Port C, Bit 2 / GPIFADR2	8	RDY2	Input	FX2 GPIF input signal 2
9	PC3	I/O	FX2 Port C, Bit 3 / GPIFADR3	10	RDY3	Input	FX2 GPIF input signal 3
11	PC4	I/O	FX2 Port C, Bit 4 / GPIFADR4	12	RDY4	Input	FX2 GPIF input signal 4
13	PC5	I/O	FX2 Port C, Bit 5 / GPIFADR5	14	RDY5	Input	FX2 GPIF input signal 5
15	PC6	I/O	FX2 Port C, Bit 6 / GPIFADR6	16	RXD1	Input	FX2 Serial Port 1 TTL RxD (Do not use if U1 is populated)
17	PC7	I/O	FX2 Port C, Bit 7 / GPIFADR7	18	TXD1	Output	FX2 Serial Port 1 TTL RxD (Do not use if U1 is populated)
19	PD0	I/O	FX2 Port D, Bit 0 / FD8	20	PE0	I/O	FX2 Port E, Bit 0 / DATA0 / MOSI
21	PD1	I/O	FX2 Port D, Bit 1 / FD9	22	PE1	I/O	FX2 Port E, Bit 1 / DCLK / SCK
23	PD2	I/O	FX2 Port D, Bit 2 / FD10	24	PE2	I/O	FX2 Port E, Bit 2 / nCE
25	PD3	I/O	FX2 Port D, Bit 3 / FD11	26	PE3	I/O	FX2 Port E, Bit 3 / nCONFIG
27	PD4	I/O	FX2 Port D, Bit 4 / FD12	28	PE4	I/O	FX2 Port E, Bit 4 / nSTATUS
29	PD5	I/O	FX2 Port D, Bit 5 / FD13	30	PE5	I/O	FX2 Port E, Bit 5 / CONF_DONE / MISO
31	PD6	I/O	FX2 Port D, Bit 6 / FD14	32	PE6	I/O	FX2 Port E, Bit 6 / nSS0
33	PD7	I/O	FX2 Port D, Bit 7 / FD15	34	PE7	I/O	FX2 Port E, Bit 7 / GPIFADR8 / nSS1
35	SCL	OD	Clock for I2C interface (Termination supplied on-board)	36	WAKEUP_B	Input	FX2 USB Wakeup. Active low.
37	SDA	OD	Data for I2C interface (Termination supplied on-board)	38	INT5_B	Input	FX2 INT5 Interrupt Request. Active low, edge sensitive
39	GND	N/A	Ground	40	GND	N/A	Ground

Connector	J4		Molex 52892-3095 FFC Connector		Pin	Name	Dir	Description
Pin	Name	Dir	Description					
1	+5V	N/A	+5VDC		16	PD5		FX2 Port D, Bit 5 / FD13
2	+5V		+5VDC		17	PD4		FX2 Port D, Bit 4 / FD12
3	PA5		SPARE0		18	PD3		FX2 Port D, Bit 3 / FD11
4	PA4		PWDN		19	PD2		FX2 Port D, Bit 2 / FD10
5	PA3		RESET		20	PD1		FX2 Port D, Bit 1 / FD9
6	PA2		OE		21	PD0		FX2 Port D, Bit 0 / FD8
7	PA1		EXTSYNC		22	PB7		FX2 Port B, Bit 7 / FD7
8	PA0		SNAPSHOT		23	PB6		FX2 Port B, Bit 6 / FD6
9	SDA		I2C data		24	PB5		FX2 Port B, Bit 5 / FD5
10	SCL		I2C clock		25	PB4		FX2 Port B, Bit 4 / FD4
11	RDY0		VSYNC		26	PB3		FX2 Port B, Bit 3 / FD3
12	RDY1		HREF		27	PB2		FX2 Port B, Bit 2 / FD2
13	CLKOUT		MCLK		28	PB1		FX2 Port B, Bit 1 / FD1
14	IFCLK		PCLK		29	PB0		FX2 Port B, Bit 0 / FD0
15	DGND		Digital ground		30	DGND		Digital ground

Connector	J5		10-Pin 0.1" Dual Row Header	Connector	J6		10-Pin 0.1" Dual Row Header
Pin	Name	Dir	Description	Pin	Name	Dir	Description
1	NC	N/A	Not Connected	1	NC	N/A	Not Connected
2	TXD_0	Output	FX2 RXD_0 Pin 51 (NULL Modem incorporated into board)	2	TXD_1	Output	FX2 RXD_1 Pin 53 (NULL Modem incorporated into board)
3	RXD_0	Input	FX2 TXD_0 Pin 50 (NULL Modem incorporated into board)	3	RXD_1	Input	FX2 TXD_1 Pin 52 (NULL Modem incorporated into board)
4	NC	N/A	Not Connected	4	NC	N/A	Not Connected
5	GND	N/A	Ground	5	GND	N/A	Ground
6	NC	N/A	Not Connected	6	NC	N/A	Not Connected
7	NC	N/A	Not Connected	7	NC	N/A	Not Connected
8	NC	N/A	Not Connected	8	NC	N/A	Not Connected
9	NC	N/A	Not Connected	9	NC	N/A	Not Connected

Notes:
1) +5V is the USB bus power. Do not exceed 300mA current drain. USB bus supplies 500mA and QuickUSB consumes 200mA.
2) RXD0, TXD0, RXD1 & TXD1 are TTL serial lines from the FX2. These signals are only usable when U1 is not populated.