

**QuickUSB Adapter Board Pinout**

 Rev B  
 Date 3/16/2007

 6489 Calle Real, Suite E  
 Goleta, CA 93117  
 (805) 683-6469  
 support@bitwisesys.com

Connector J2 40-Pin 0.1" Dual Row Header				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)	1	+5V	N/A	Unregulated +5V from the USB bus (300mA total)
3	PA0	I/O	FX2 Port A, Bit 0 / nSS2	3	PC0	I/O	FX2 Port C, Bit 0 / GPIFADR0
5	PA1	I/O	FX2 Port A, Bit 1 / nSS3	5	PC1	I/O	FX2 Port C, Bit 1 / GPIFADR1
7	PA2	I/O	FX2 Port A, Bit 2 / nSS4 / SLOE	7	PC2	I/O	FX2 Port C, Bit 2 / GPIFADR2
9	PA3	I/O	FX2 Port A, Bit 3 / nSS5	9	PC3	I/O	FX2 Port C, Bit 3 / GPIFADR3
11	PA4	I/O	FX2 Port A, Bit 4 / nSS6 / FIFOADR0	11	PC4	I/O	FX2 Port C, Bit 4 / GPIFADR4
13	PA5	I/O	FX2 Port A, Bit 5 / nSS7 / FIFOADR1	13	PC5	I/O	FX2 Port C, Bit 5 / GPIFADR5
15	PA6	I/O	FX2 Port A, Bit 6 / nSS8 / PKTEND	15	PC6	I/O	FX2 Port C, Bit 6 / GPIFADR6
17	PA7	I/O	FX2 Port A, Bit 7 / nSS9 / FLAGD (SLCS)	17	PC7	I/O	FX2 Port C, Bit 7 / GPIFADR7
19	PB0	I/O	FX2 Port B, Bit 0 / FD0	19	PD0	I/O	FX2 Port D, Bit 0 / FD8
21	PB1	I/O	FX2 Port B, Bit 1 / FD1	21	PD1	I/O	FX2 Port D, Bit 1 / FD9
23	PB2	I/O	FX2 Port B, Bit 2 / FD2	23	PD2	I/O	FX2 Port D, Bit 2 / FD10
25	PB3	I/O	FX2 Port B, Bit 3 / FD3	25	PD3	I/O	FX2 Port D, Bit 3 / FD11
27	PB4	I/O	FX2 Port B, Bit 4 / FD4	27	PD4	I/O	FX2 Port D, Bit 4 / FD12
29	PB5	I/O	FX2 Port B, Bit 5 / FD5	29	PD5	I/O	FX2 Port D, Bit 5 / FD13
31	PB6	I/O	FX2 Port B, Bit 6 / FD6	31	PD6	I/O	FX2 Port D, Bit 6 / FD14
33	PB7	I/O	FX2 Port B, Bit 7 / FD7	33	PD7	I/O	FX2 Port D, Bit 7 / FD15
35	T0	Input	FX2 Input for Timer0 (Currently not used)	35	SCL	OD	Clock for I2C interface (Termination supplied on-board)
37	NC	N/A	No Connect	37	SDA	OD	Data for I2C interface (Termination supplied on-board)
39	GND	N/A	Ground	39	GND	N/A	Ground
2	+5V	N/A	Unregulated +5V from the USB bus (300mA total)	2	+5V	N/A	Unregulated +5V from the USB bus (300mA total)
4	RESET_B	OD	FX2 Reset, Active low.	4	RDY0	Input	FX2 GPIF input signal 0 / SLRD
6	CLKOUT	Output	FX2 48MHz CPU clock	6	RDY1	Input	FX2 GPIF input signal 1 / SLWR
8	IFCLK	Output	FX2 48MHz GPIO clock	8	RDY2	Input	FX2 GPIF input signal 2
10	INT4	Input	FX2 INT4 IRQ. Active high, edge sensitive	10	RDY3	Input	FX2 GPIF input signal 3
12	RXD_0	Input	FX2 Serial Port 0 RS-232 RxD	12	RDY4	Input	FX2 GPIF input signal 4
14	TXD_0	Output	FX2 Serial Port 0 RS-232 TxD	14	RDY5	Input	FX2 GPIF input signal 5
16	TXD_1	Output	FX2 Serial Port 1 RS-232 TxD	16	RXD1	Input	FX2 Serial Port 1 TTL RxD (Do not use if U1 is populated)
18	RXD_1	Input	FX2 Serial Port 1 RS-232 RxD	18	TXD1	Output	FX2 Serial Port 1 TTL TxD (Do not use if U1 is populated)
20	CTL0	Output	FX2 GPIF CTL 0 / CMD_DATA / FLAGA (PF)	20	PE0	I/O	FX2 Port E, Bit 0 / DATA0 / MOSI
22	CTL1	Output	FX2 GPIF CTL 1 / REN / FLAGB (FULL)	22	PE1	I/O	FX2 Port E, Bit 1 / DCLK / SCK
24	CTL2	Output	FX2 GPIF CTL 2 / WEN / FLAGC (EMPTY)	24	PE2	I/O	FX2 Port E, Bit 2 / nCE
26	CTL3	Output	FX2 GPIF CTL 3 / nREN	26	PE3	I/O	FX2 Port E, Bit 3 / nCONFIG
28	CTL4	Output	FX2 GPIF CTL 4 / nWEN	28	PE4	I/O	FX2 Port E, Bit 4 / nSTATUS
30	CTL5	Output	FX2 GPIF CTL 5 / AEN	30	PE5	I/O	FX2 Port E, Bit 5 / CONF_DONE / MISO
32	RXD0	Input	FX2 Serial Port 0 TTL RxD (Do not use if U1 is populated)	32	PE6	I/O	FX2 Port E, Bit 6 / nSS0
34	TXD0	Output	FX2 Serial Port 0 TTL TxD (Do not use if U1 is populated)	34	PE7	I/O	FX2 Port E, Bit 7 / GPIFADR8 / nSS1
36	T1	Input	FX2 Input for Timer1 (Currently not used)	36	WAKEUP_B	Input	FX2 USB Wakeup. Active low.
38	NC	N/A	No Connect	38	INT5_B	Input	FX2 INT5 Interrupt Request. Active low, edge sensitive
40	GND	N/A	Ground	40	GND	N/A	Ground

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**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**

Pin	Name	Dir	Description
1	NC	N/A	Not Connected
2	TXD_0	Output	FX2 RXD_0 Pin 51 (NULL Modem incorporated into board)
3	RXD_0	Input	FX2 TXD_0 Pin 50 (NULL Modem incorporated into board)
4	NC	N/A	Not Connected
5	GND	N/A	Ground
6	NC	N/A	Not Connected
7	NC	N/A	Not Connected
8	NC	N/A	Not Connected
9	NC	N/A	Not Connected

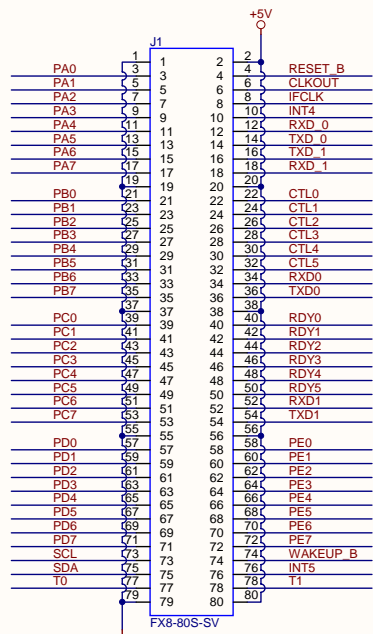
**Connector J6 10-Pin 0.1" Dual Row Header**

Pin	Name	Dir	Description
1	NC	N/A	Not Connected
2	TXD_1	Output	FX2 RXD_1 Pin 53 (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
5	GND	N/A	Ground
6	NC	N/A	Not Connected
7	NC	N/A	Not Connected
8	NC	N/A	Not Connected
9	NC	N/A	Not Connected

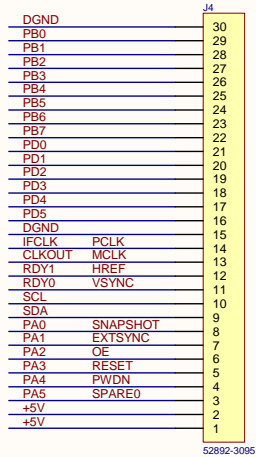
Notes:

- 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.

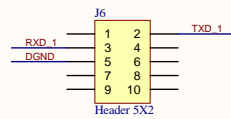
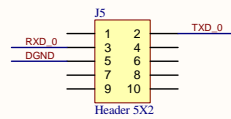
### QuickUSB Target Interface



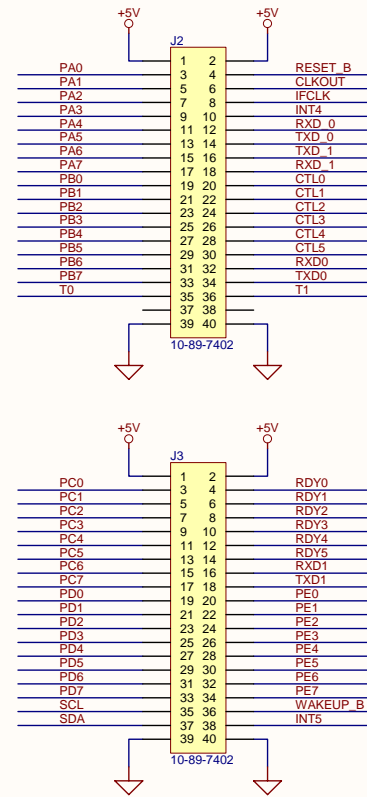
### Camera Interface



### RS-232 Ports



### Adapter Board I/O Headers



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Title			
QuickUSB® Adapter Board			
Size	Number	Revision	
B	QUSBAB	B	
Date:	10/9/2006	Sheet of	1 of 1
File:	C:\Projects\...QuickUSB Adapter Board		