

Figure 1: FLEX Demo Daughter Board

CON9 (Power Connector)

Pin 1	V_{out}	Pin 2	GND_{out}
Pin 3	+5V	Pin 4	GND
Pin 5	+3.3V	Pin 6	GND

CON3 + CON4 (ZigBee Connector)

CON3		CON4	
Pin 1	+3.3V	Pin 1	GND
Pin 2	Reset	Pin 2	V_{reg}
Pin 3	FIFO	Pin 3	CSN
Pin 4	SDO	Pin 4	SDI
Pin 5	SCK	Pin 5	CCA
Pin 6	SFD	Pin 6	FIFOP

CON8 (AUX2 Connector)

Pin 1	Encoder Index	Pin 2	$PWM_{out} 1L$
Pin 3	Encoder Channel A	Pin 4	$PWM_{out} 1H$
Pin 5	Encoder Channel B	Pin 6	$PWM_{out} 2L$
Pin 7	OC8	Pin 8	$PWM_{out} 2H$
Pin 9	Analog Input 19	Pin 10	$PWM_{out} 3L$
Pin 11	OC3	Pin 12	$PWM_{out} 3H$
Pin 13	DSP_{PCLK}	Pin 14	$PWM_{out} 4L$
Pin 15	DSP_{PDATA}	Pin 16	$PWM_{out} 4H$
Pin 17	DSP_{MCLR}	Pin 18	Analog Input 20
Pin 19	$AV SS_{ext}$	Pin 20	Analog Input 21
Pin 21	$AV DD_{ext}$	Pin 22	GND

Jumper	pos. 1-2	pos. 2-3
DAC Vref+ [JP1]	+5V	+3.3V
DAC Vref- [JP2]	GND	GND _{out}
Aux Vdd [JP3]	V _{out}	+5V
UART Vss [JP4]	GND	GND _{out}
UART Aux [JP5]	INT (Konnex/EIB)	RTS (232/422/TTL)
Buzzer Vdd [JP6]	V _{out}	+5V

Note: Default jumper settings are indicated with grey background

MORS3 (UART Connector)	
Pin 1	CTS (232/TTL) / TX+ (422)
Pin 2	RX (232/TTL) / TX- (422) / 485- (485)
Pin 3	TX (232/TTL) / RX+ (422) / 485+ (485)
Pin 4	RTS (232/TTL) / RX- (422)
Pin 5	GND

CON 6 (UART slot)	
Pin 1	+5V
Pin 2	RF5 (TX1)
Pin 3	RF12 (SCK1)
Pin 4	RF4 (RX1)
Pin 5	JP6 (default pos. 1-2 i.e. Vout)
Pin 6	JP4 (default pos. 2.3 i.e. GND)

CON 7 (UART slot)	
Pin 1	CTS (232/TTL) / TX+ (422)
Pin 2	RX (232/TTL) / TX- (422) / 485- (485)
Pin 3	TX (232/TTL) / RX+ (422) / 485+ (485)
Pin 4	RTS (232/TTL) / RX- (422)
Pin 5	GND

LEDs	
DL1 (<i>yellow</i>)	RF0
DL2 (<i>yellow</i>)	RF1
DL3 (<i>yellow</i>)	RF2
DL4 (<i>yellow</i>)	RF3
DL5 (<i>yellow</i>)	RD8
DL6 (<i>yellow</i>)	RD9
DL7 (<i>yellow</i>)	RD10
DL8 (<i>yellow</i>)	RD11

Push Btns.	Pin	pos. 1-2 (normal)	pos. 3-4 (pressed)
PULS1	RD4	+5V	GND
PULS2	RD5	+5V	GND
PULS3	RD6	+5V	GND
PULS4	RD15	+5V	GND

MORS1 (DAC Connector)	
Pin 1	Analog Output 1
Pin 2	GND
Pin 3	Analog Output 2
Pin 4	GND

MORS2 (AUX Connector)	
Pin 1	Data 1
Pin 2	Data 2
Pin 3	V _{out} / +5V (selectable)
Pin 4	GND

Standard Connectors for Piggybacking	
▪	64 pin [CON2] (refer CON6 of FLEX Base Board)
▪	40 pin [CON5] (refer CON5 of FLEX Base Board)
▪	16 pin [CON1] (refer CON3 of FLEX Base Board)

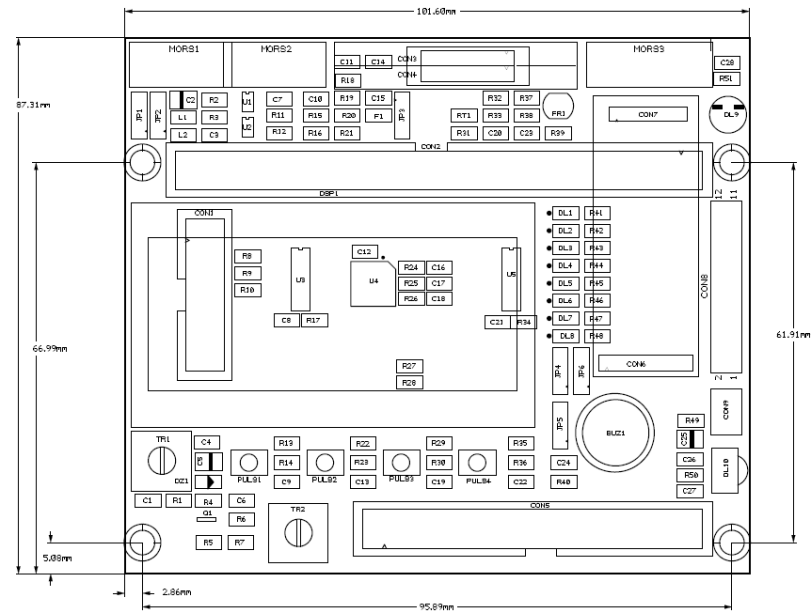


Figure 2: FLEX Demo Daughter Board Dimensions