ATMega809 breakout board
24 digital I/O pins available

Pin	16	15	14	13	12
Name	**VIN**	**VBUS**	**VDD**	**VREF**	**GND**

Pin	11	10	9	8	7	6	5	4	3	2	1	0
Name	**GND**	**D9**	**D8**	**RX0**	**TX0**	**D5**	**D4**	**D3**	**D2**	**RX1**	**TX1**	**GND**
Timer/PWM		TCB3	TCB2					TCB1	TCB0			
Alt Name		RX2	TX2	D7	D6	EVOUTA				D1	D0	
Mega-0 Pad		PC1	PC0	PB1	PB0	PA7	PA6	PA3	PA2	PA1	PA0	

Mega-0 Pad		PC2	PC3	PD0	PD1	PD2	PD3	PD4	PD5	PE0	PE1	PE2	PE3		PF0	PF1	PF2	PF3	PF6	
Alt Name		TWD	TWCK	D10	D11	D12/EVOUTD	A3	A4	A5	D16/A6	D17/A7	D18/A8	D19/A9					LED		
Timer/PWM				TCA0	TCA0	TCA0	TCA0	TCA0	TCA0											
Name	**GND**	**SDA**	**SCL**	**A0**	**A1**	**A2**	**D13**	**D14**	**D15**	**MOSI**	**MISO**	**SCK**	**SS**	**GND**	**D20**	**D21**	**D22**	**D23**	**RESET_L**	**GND**
Pin	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Power
Ground
I2C / TWI
SPI
UART
Analog
CCL

VIN: Power to regulator; VDD: Power to MCU (from VIN, VUSB, or thru this pin); VBUS - I2C; VREF - Analog ref.

Level-shifting I2C bus; requires power on VBUS matching Vcc of communicating device/bus.
SPI alt. position on PORTE
Serial port (Arduino HWSERIAL*n*)
Analog input referenced against VREF
4x LUT inputs on Px0..2, output on Px3

All pins except I2C and RESET_L support digital GPIO
EVENT outputs distributed throughout
TCA0 PWM output on D10..D15
TCB0..3 PWM output on D2, D3, D8, D9
See ATmega808/809/1608/1609 Data Sheet, *section 4*

UPDI HEADER

UPDI	**VDD**
N/C	**RX1**
TX1	**GND**

6-pin UPDI Header only *requires* UPDI and GND pins connected,
but offers ability to power MCU and use serial from programmer

v1.0