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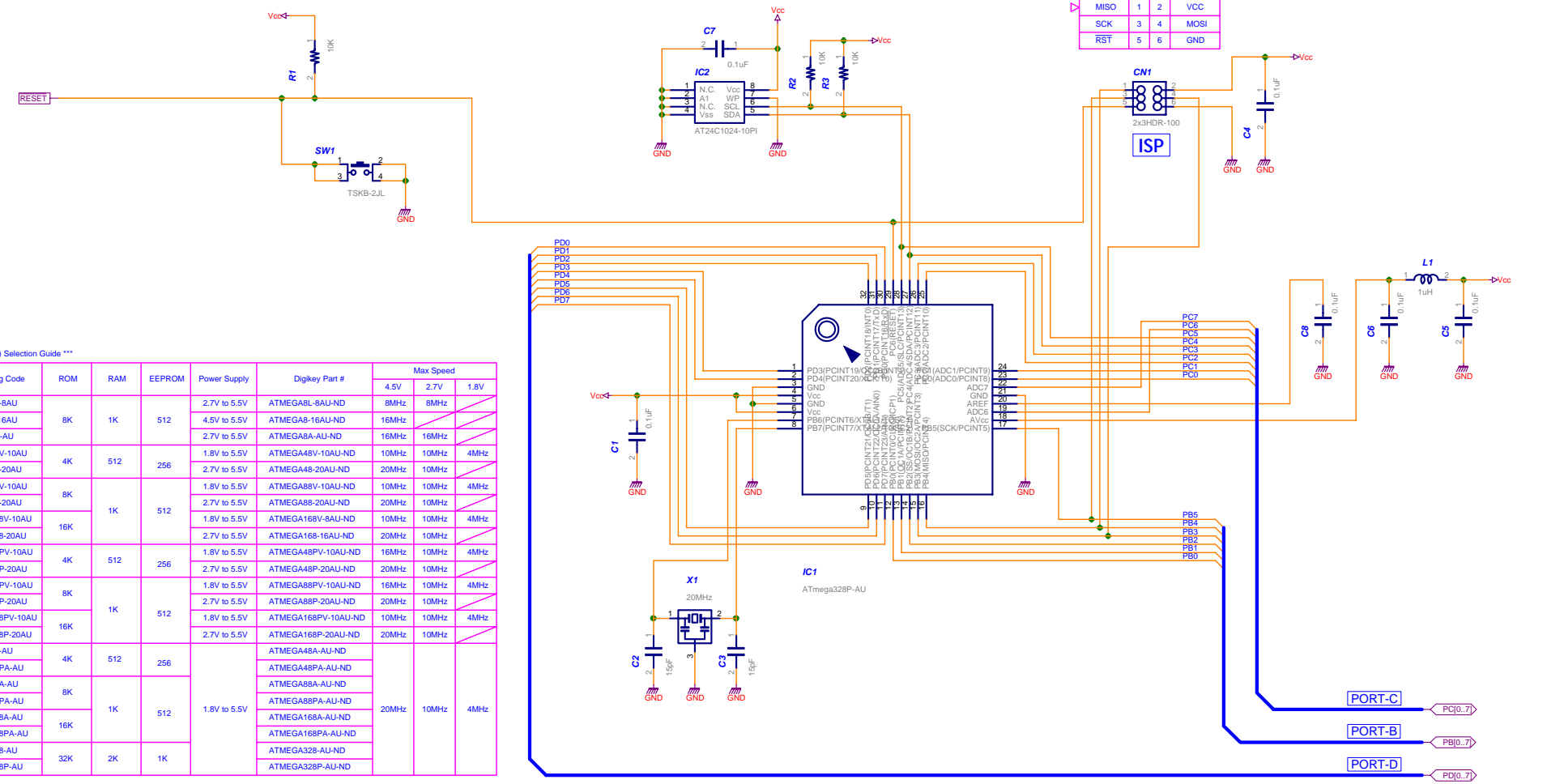
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NANDethno Pocket Mega #2 (ALL)

[Generic Prototyping Board /w ATmega8/88/168/328]

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NANDethno Pocket Mega2	
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MISO	1	2	VCC
SCK	3	4	MOSI
RST	5	6	GND

*** MCU (IC1) Selection Guide ***

Ordering Code	ROM	RAM	EEPROM	Power Supply	Digkey Part #	Max Speed		
						4.5V	2.7V	1.8V
ATmega8L-8AU				2.7V to 5.5V	ATMEGA8L-8AU-ND	8MHz	8MHz	
ATmega8-16AU	8K	1K	512	4.5V to 5.5V	ATMEGA8-16AU-ND	16MHz		
ATmega8A-AU				2.7V to 5.5V	ATMEGA8A-AU-ND	16MHz	16MHz	
ATmega48V-10AU				1.8V to 5.5V	ATMEGA48V-10AU-ND	10MHz	10MHz	4MHz
ATmega48-20AU	4K	512	256	2.7V to 5.5V	ATMEGA48-20AU-ND	20MHz	10MHz	
ATmega88V-10AU				1.8V to 5.5V	ATMEGA88V-10AU-ND	10MHz	10MHz	4MHz
ATmega88-20AU	8K			2.7V to 5.5V	ATMEGA88-20AU-ND	20MHz	10MHz	
ATmega168V-10AU		1K	512	1.8V to 5.5V	ATMEGA168V-8AU-ND	10MHz	10MHz	4MHz
ATmega168-20AU	16K			2.7V to 5.5V	ATMEGA168-16AU-ND	20MHz	10MHz	
ATmega48PV-10AU				1.8V to 5.5V	ATMEGA48PV-10AU-ND	16MHz	10MHz	4MHz
ATmega48P-20AU	4K	512	256	2.7V to 5.5V	ATMEGA48P-20AU-ND	20MHz	10MHz	
ATmega88PV-10AU				1.8V to 5.5V	ATMEGA88PV-10AU-ND	16MHz	10MHz	4MHz
ATmega88P-20AU	8K			2.7V to 5.5V	ATMEGA88P-20AU-ND	20MHz	10MHz	
ATmega168PV-10AU		1K	512	1.8V to 5.5V	ATMEGA168PV-10AU-ND	10MHz	10MHz	4MHz
ATmega168P-20AU	16K			2.7V to 5.5V	ATMEGA168P-20AU-ND	20MHz	10MHz	
ATmega48-AU				1.8V to 5.5V	ATMEGA48A-AU-ND			
ATmega48PA-AU	4K	512	256		ATMEGA48PA-AU-ND			
ATmega88A-AU					ATMEGA88A-AU-ND			
ATmega88PA-AU	8K				ATMEGA88PA-AU-ND	20MHz	10MHz	4MHz
ATmega168A-AU		1K	512	ATMEGA168A-AU-ND				
ATmega168PA-AU	16K			ATMEGA168PA-AU-ND				
ATmega328-AU				ATMEGA328-AU-ND				
ATmega328P-AU	32K	2K	1K	ATMEGA328P-AU-ND				

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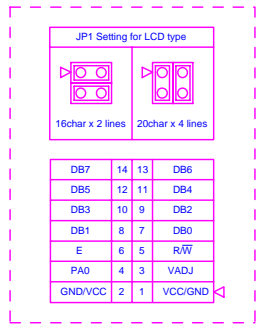
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PD7(AIN1/PCINT23)	14	13	PD6(AIN0/OC0A/PCINT22)
PD5(T1/OC0B/PCINT21)	12	11	PD4(T0/XCK/PCINT20)
N.C. (Reserved)	10	9	N.C. (Reserved)
N.C. (Reserved)	8	7	N.C. (Reserved)
PB3(MOSI/OC2A/PCINT3)	6	5	PB2(SS/OC1B/PCINT2)
PB1(OC1A/PCINT1)	4	3	N.C. (VADJ)
GND/VCC	2	1	VCC/GND

1	GND
2	PD6(X/PCINT16)
3	PD1(TXD/PCINT17)
4	PD2(INT0/PCINT18)
5	PD3(INT1/OC2B/PCINT19)
6	PD4(T0/XCK/PCINT20)
7	PD5(T1/OC0B/PCINT21)
8	PD6(AIN0/OC0A/PCINT22)
9	PD7(AIN1/PCINT23)
10	Vcc

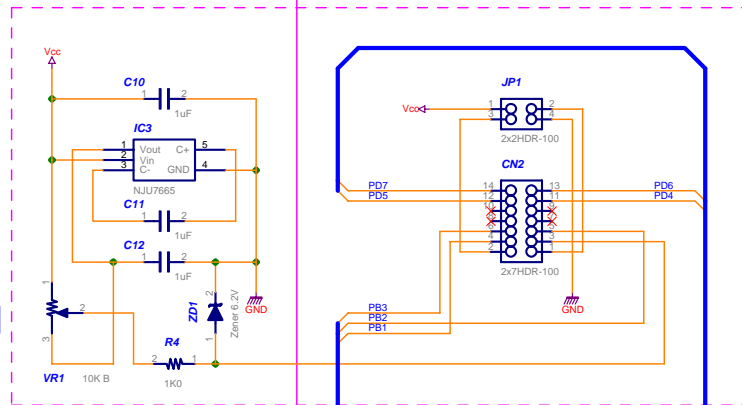
10	Vcc
9	ADCF
8	AD06
7	PC5(ADC5/SCL/PCINT13)
6	PC4(ADC4/SDA/PCINT12)
5	PC3(ADC3/PCINT11)
4	PC2(ADC2/PCINT10)
3	PC1(ADC1/PCINT9)
2	PC0(ADC0/PCINT8)
1	GND

Port-D/Port-B

Port-D

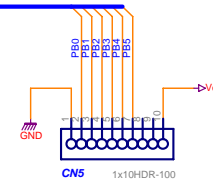
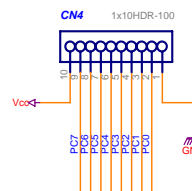
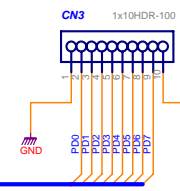
Port-C

LCD-I/F



Contrast Adj.

DC-DC for LCD bias



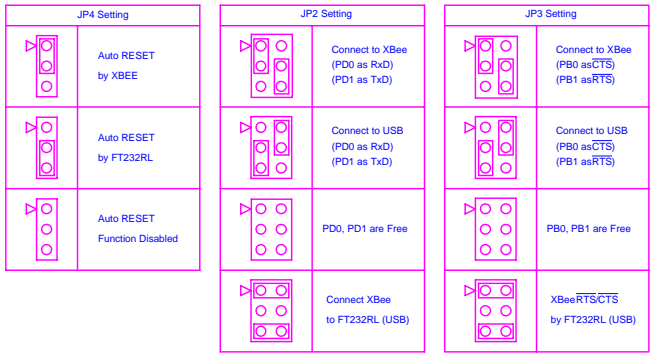
Port-B

1	GND
2	PB0(ICF1/CLK/PCINT0)
3	PB1(OC1A/PCINT1)
4	PB2(SS/OC2A/PCINT2)
5	PB3(MOSI/OC2A/PCINT3)
6	PB4(MISO/PCINT4)
7	PB5(SCK/PCINT5)
8	N.C. (Reserved)
9	N.C. (Reserved)
10	Vcc

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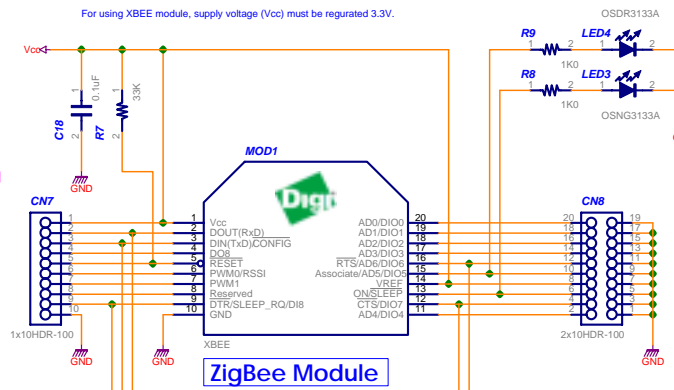
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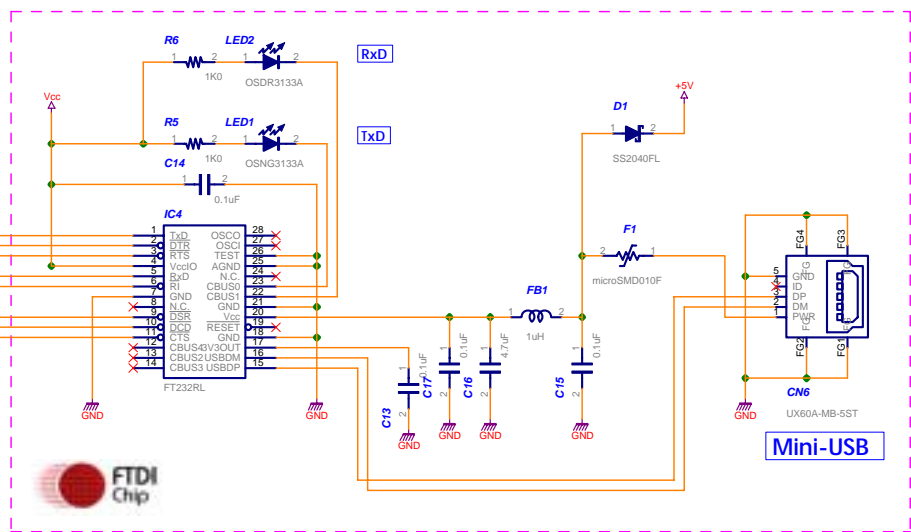
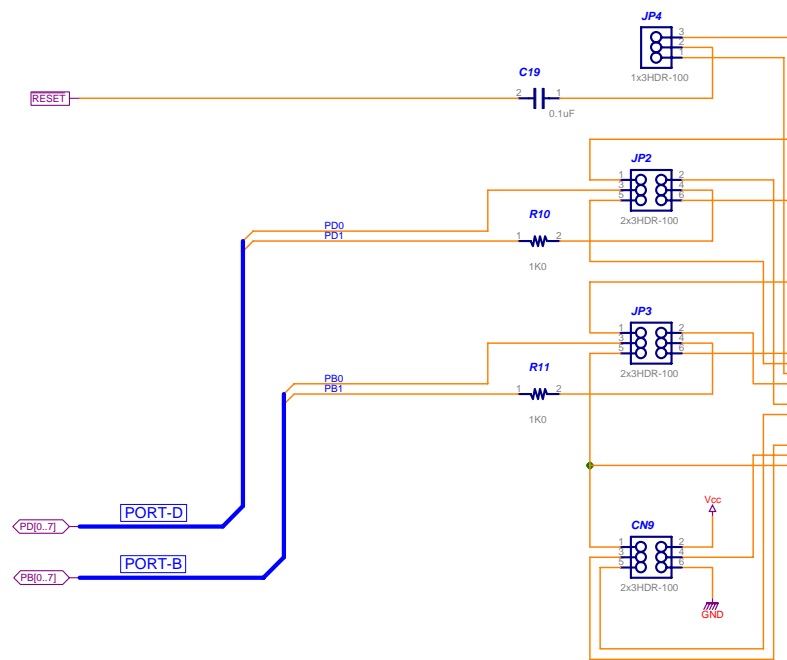
Pin	Function
1	Vcc(+3.3V)
2	DOUT(RxD)
3	DIN(TxD)/CONFIG
4	DO8
5	RESET
6	PWM0/RSSI
7	PWM1
8	Reserved
9	DTR/SLEEP_RQ/Di8
10	GND

*** Design Notes ***
For using XBEE module, supply voltage (Vcc) must be regulated 3.3V.



Associate
On

AD0/DIO0	19	20	GND
AD1/DIO1	17	18	GND
AD2/DIO2	15	16	GND
AD3/DIO3	13	14	GND
RTS/AD6/DIO6	11	12	GND
Associate/AD5/DIO5	9	10	GND
VREF	7	8	GND
ONSLEEP	5	6	GND
CTS/DIO7	3	4	GND
AD4/DIO4	1	2	GND



5	GND
4	N.C.
3	DATA+
2	DATA-
1	BusPwr

Pin	Function
1	CTS (MISO)
2	Vcc
3	DSR (SCK)
4	DCC (MOSI)
5	Ri (RESET)
6	GND

Bit-Bang ISP

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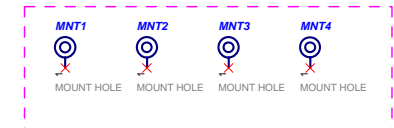
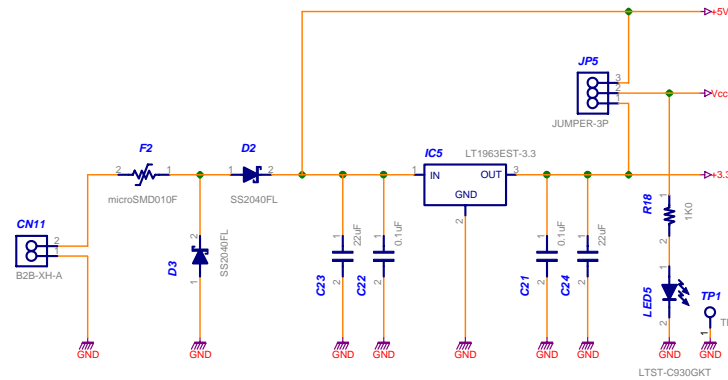
*** 3.3V LDO Regulator IC Selection Guide ***

Order Part Number	Dropout Voltage	Output Current	MAX. Input Voltage
LT1129CST-3.3#PBF	400mV	700mA	+/-30V
LT1129IST-3.3#PBF	400mV	700mA	+/-30V
LT1963EST-3.3#PBF	340mV	1.5A	+/-20V
LT1963AEST-3.3#PBF	340mV	1.5A	+/-20V

JP2 Setting	Supply Voltage (Vcc)
	5V (USBPWR) 3.3V Reg. required
	3.3V 3.3V Reg. not required

*** Design Notes ***

For using XBEE module, supply voltage (Vcc) must be regulated 3.3V.
 Using as USB powered or 5V supply, on-board LDO is required, short 2-3 on JP2.
 If supply voltage is 3.3V, on-board LDO is not required, short 1-2 on JP2.
 When operating voltage (Vcc) is supplied from external, remove JP2 jumpers.



Mounting Holes



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