

ATmegaTQ6401A

1.00 First Version

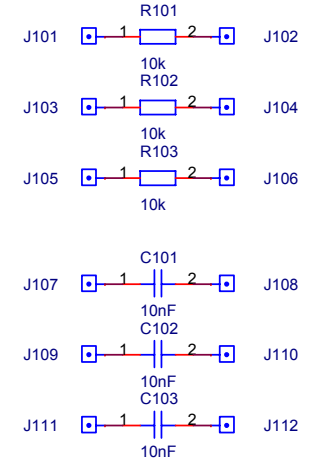
Alternatives:

| | | |
|--------------|---------------|----------|
| ATmega64 | MOSI/MISO/SCK | E0/E1/B1 |
| ATmega128 | PDI/PDO/SCK | E0/E1/B1 |
| ATmega1281 | PDI/PDO/SCK | E0/E1/B1 |
| ATmega2561 | PDI/PDO/SCK | E0/E1/B1 |
| ATmega165 | MOSI/MISO/SCK | B2/B3/B1 |
| ATmega325 | MOSI/MISO/SCK | B2/B3/B1 |
| ATmega645 | MOSI/MISO/SCK | B2/B3/B1 |
| and more ... | | |

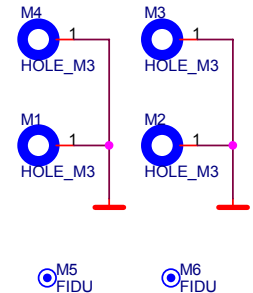
Devices just for reference (pinout)

| U101 | | | U102 | | | U103 | | | U104 | | |
|------|---------------|--------------|------|----|----------------------|--------------|----|----|---------------------|--------------|----|
| 1 | PEN# | AVCC | 64 | 1 | PG5/OC0B | AVCC | 64 | 1 | DNC | AVCC | 64 |
| 2 | PE0/RXD0/PDI | GND | 63 | 2 | PE0/RXD0/PCINT8/PDI | GND | 63 | 2 | PE0/RXD/PCINT0 | GND | 63 |
| 3 | PE1/TXD0/PDO | AREF | 62 | 3 | PE1/TXD0/PDO | AREF | 62 | 3 | PE1/TXD/PCINT1 | AREF | 62 |
| 4 | PE2/XCK0/AIN0 | ADC0/PF0 | 61 | 4 | PE2/XCK0/AIN0 | ADC0/PF0 | 61 | 4 | PE2/XCK/AIN0/PCINT2 | ADC0/PF0 | 61 |
| 5 | PE3/OC3A/AIN1 | ADC1/PF1 | 60 | 5 | PE3/OC3A/AIN1 | ADC1/PF1 | 60 | 5 | PE3/AIN1/PCINT3 | ADC1/PF1 | 60 |
| 6 | PE4/OC3B/INT4 | ADC2/PF2 | 59 | 6 | PE4/OC3B/INT4 | ADC2/PF2 | 59 | 6 | PE4/USCK/SCL/PCINT4 | ADC2/PF2 | 59 |
| 7 | PE5/OC3C/INT5 | ADC3/PF3 | 58 | 7 | PE5/OC3C/INT5 | ADC3/PF3 | 58 | 7 | PE5/DI/SDA/PCINT5 | ADC3/PF3 | 58 |
| 8 | PE6/T3/INT6 | ADC4/TCK/PF4 | 57 | 8 | PE6/T3/INT6 | ADC4/TCK/PF4 | 57 | 8 | PE6/DO/PCINT6 | ADC4/TCK/PF4 | 57 |
| 9 | PE7/ICP3/INT7 | ADC5/TMS/PF5 | 56 | 9 | PE7/ICP3/CLKO/INT7 | ADC5/TMS/PF5 | 56 | 9 | PE7/CLKO/PCINT7 | ADC5/TMS/PF5 | 56 |
| 10 | PB0/SS# | ADC6/TDO/PF6 | 55 | 10 | PB0/SS#/PCINT0 | ADC6/TDO/PF6 | 55 | 10 | PB0/SS#/PCINT8 | ADC6/TDO/PF6 | 55 |
| 11 | PB1/SCK | ADC7/TDI/PF7 | 54 | 11 | PB1/SCK/PCINT1 | ADC7/TDI/PF7 | 54 | 11 | PB1/SCK/PCINT9 | ADC7/TDI/PF7 | 54 |
| 12 | PB2/MOSI | GND | 53 | 12 | PB2/MOSI/PCINT2 | GND | 53 | 12 | PB2/MOSI/PCINT10 | GND | 53 |
| 13 | PB3/MISO | VCC | 52 | 13 | PB3/MISO/PCINT3 | VCC | 52 | 13 | PB3/MISO/PCINT11 | VCC | 52 |
| 14 | PB4/OC0 | AD0/PA0 | 51 | 14 | PB4/OC2A/PCINT4 | AD0/PA0 | 51 | 14 | PB4/OC0A/PCINT12 | PA0 | 51 |
| 15 | PB5/OC1A | AD1/PA1 | 50 | 15 | PB5/OC1A/PCINT5 | AD1/PA1 | 50 | 15 | PB5/OC1A/PCINT13 | PA1 | 50 |
| 16 | PB6/OC1B | AD2/PA2 | 49 | 16 | PB6/OC1B/PCINT6 | AD2/PA2 | 49 | 16 | PB6/OC1B/PCINT14 | PA2 | 49 |
| 17 | PB7/OC2/OC1C | AD3/PA3 | 48 | 17 | PB7/OC0A/OC1C/PCINT7 | AD3/PA3 | 48 | 17 | PB7/OC2A/PCINT15 | PA3 | 48 |
| 18 | PG3/TOSC2 | AD4/PA4 | 47 | 18 | PG3/TOSC2 | AD4/PA4 | 47 | 18 | PG3/T1 | PA4 | 47 |
| 19 | PG4/TOSC1 | AD5/PA5 | 46 | 19 | PG4/TOSC1 | AD5/PA5 | 46 | 19 | PG4/T0 | PA5 | 46 |
| 20 | RESET# | AD6/PA6 | 45 | 20 | RESET# | AD6/PA6 | 45 | 20 | PG5/RESET# | PA6 | 45 |
| 21 | VCC | AD7/PA7 | 44 | 21 | VCC | AD7/PA7 | 44 | 21 | VCC | PA7 | 44 |
| 22 | GND | ALE/PG2 | 43 | 22 | GND | ALE/PG2 | 43 | 22 | GND | PG2 | 43 |
| 23 | XTAL2 | A15/PC7 | 42 | 23 | XTAL2 | A15/PC7 | 42 | 23 | XTAL2/TOSC2 | PC7 | 42 |
| 24 | XTAL1 | A14/PC6 | 41 | 24 | XTAL1 | A14/PC6 | 41 | 24 | XTAL1/TOSC1 | PC6 | 41 |
| 25 | PD0/SCL/INT0 | A13/PC5 | 40 | 25 | PD0/SCL/INT0 | A13/PC5 | 40 | 25 | PD0/ICP1 | PC5 | 40 |
| 26 | PD1/SDA/INT1 | A12/PC4 | 39 | 26 | PD1/SDA/INT1 | A12/PC4 | 39 | 26 | PD1/INT0 | PC4 | 39 |
| 27 | PD2/RXD1/INT2 | A11/PC3 | 38 | 27 | PD2/RXD1/INT2 | A11/PC3 | 38 | 27 | PD2 | PC3 | 38 |
| 28 | PD3/TXD1/INT3 | A10/PC2 | 37 | 28 | PD3/TXD1/INT3 | A10/PC2 | 37 | 28 | PD3 | PC2 | 37 |
| 29 | PD4/ICP1 | A9/PC1 | 36 | 29 | PD4/ICP1 | A9/PC1 | 36 | 29 | PD4 | PC1 | 36 |
| 30 | PD5/XCK1 | A8/PC0 | 35 | 30 | PD5/XCK1 | A8/PC0 | 35 | 30 | PD5 | PC0 | 35 |
| 31 | PD6/T1 | RD#/PG1 | 34 | 31 | PD6/T1 | RD#/PG1 | 34 | 31 | PD6 | PG1 | 34 |
| 32 | PD7/T2 | WR#/PG0 | 33 | 32 | PD7/T0 | WR#/PG0 | 33 | 32 | PD7 | PG0 | 33 |

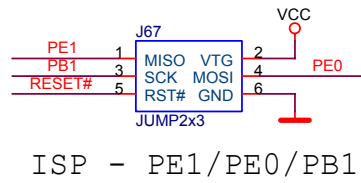
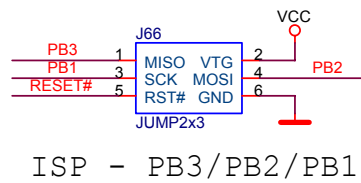
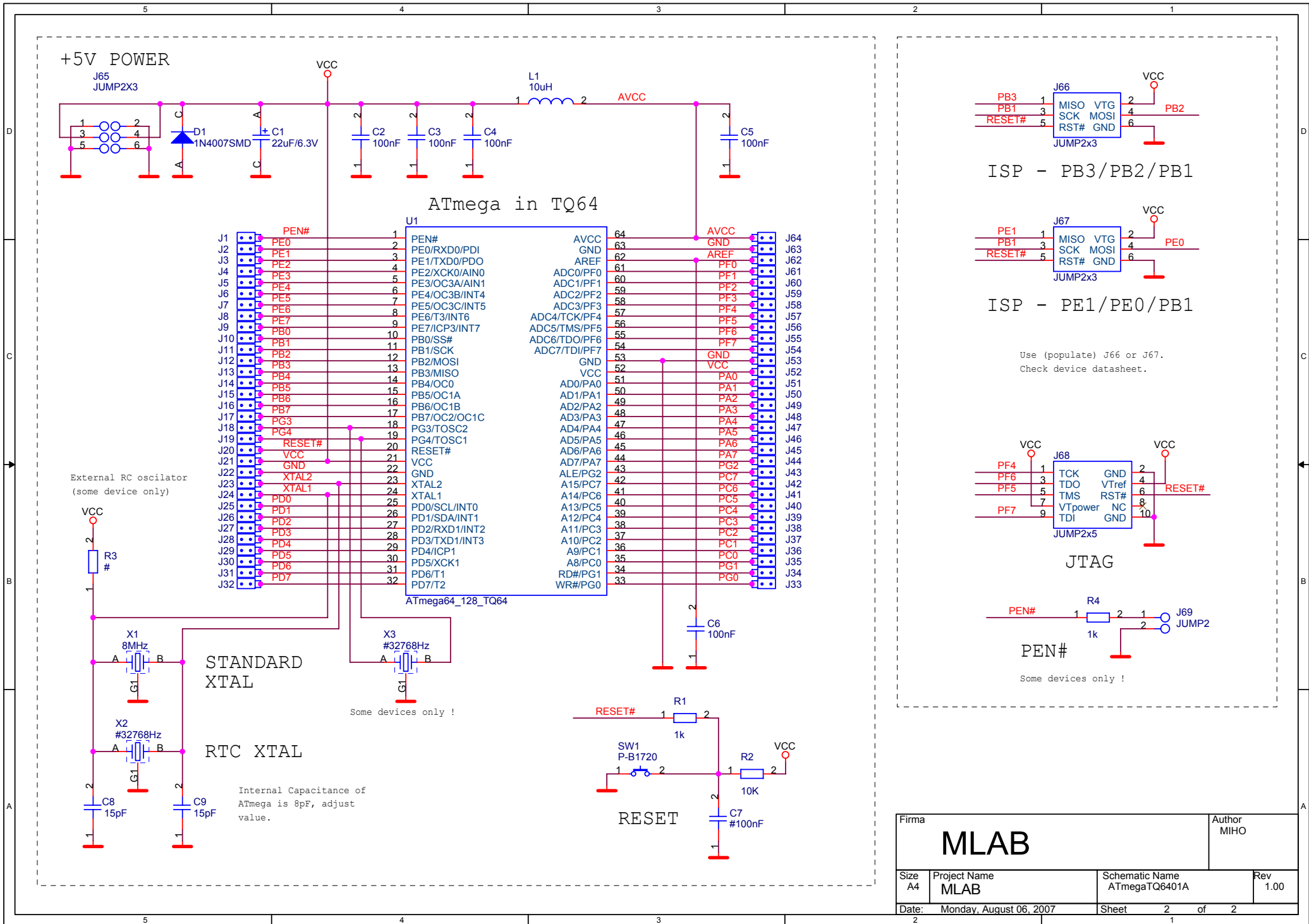
SPARE PARTS



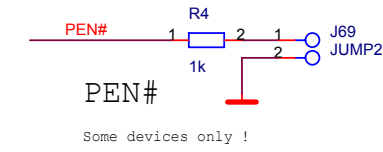
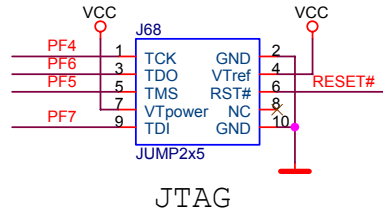
MECHANICAL



| | | | |
|-------------|-------------------------|----------------|--------|
| Firma | | Author | |
| MLAB | | MIHO | |
| Size | Project Name | Schematic Name | Rev |
| A4 | MLAB | ATmegaTQ6401A | 1.00 |
| Date: | Monday, August 06, 2007 | Sheet | 1 of 2 |



Use (populate) J66 or J67.
Check device datasheet.



| | | | |
|-------------|-------------------------|---------------------------------|-------------|
| Firma | | Author | |
| MLAB | | MIHO | |
| Size A4 | Project Name MLAB | Schematic Name ATmegaTQ6401A | Rev 1.00 |
| Date: | Monday, August 06, 2007 | Sheet | 2 of 2 |
| 2 | | 1 | |