LE35CZ

IC2
OUT IN
GND

100n 10k
C6   R15   2u2/16V
            C3
GND   GND

12MHz
C5 15p
Q1
C4 15p
GND

GND

R9 1k5
R12 1M
D− D+

X1
USB

GND

IC1

RESET   (SCK)PB7   19
             (MISO)PB6   18
             (MOSI)PB5   17
             PB4   16
             (OCI)PB3   15
XTAL2   PB2   14
XTAL1   (AIN1)PB1   13
             (AIN0)PB0   12
VCC
GND   (ICP)PD6   11
             (T1)PD5   9
             (T0)PD4   8
             (INT1)PD3   7
             (INT0)PD2   6
             (TXD)PD1   3
             (RXD)PD0   2

AT90S2313P

+5V

R10 68R
R11 68R

GND R13
10k

ISP Connector
JP1

10uF/16V
C1
GND

330R
R14

D2
1N4148

D1 D3 1N4148   D4 1N4148   D5 1N4148   D6 1N4148   D7 1N4148   D8 1N4148   D9 1N4148   D10 1N4148
1N4148

K1 G5L   K2 G5L   K3 G5L   K4 G5L   K5 G5L   K6 G5L   K7 G5L   K8 G5L

LED1   LED2   LED3   LED4   LED5   LED6   LED7   LED8

R1 1k   R2 1k   R3 1k   R4 1k   R5 1k   R6 1k   R7 1k   R8 1k

T1   T2   T3   T4   T5   T6   T7   T8
BC547   BC547   BC547   BC547   BC547   BC547   BC547   BC547
GND   GND   GND   GND   GND   GND   GND   GND

S   S   S   S   S   S   S   S
P   P   P   P   P   P   P   P
O K1   O K2   O K3   O K4   O K5   O K6   O K7   O K8

LSP3   LSP4   LSP5   LSP6   LSP7   LSP8   LSP9   LSP10

1N4004
D11
1N4004
D12

TR1

PRI

2x9V 4VA

LSP1

LSP2

C2
1000uF/16V
GND   GND

PowerSwitch

TITLE: circuit

Document Number: REV:

Date: 2/03/2005 20:29:24   Sheet: 1/1

Reference Implementation for Objective Development's Firmware-Only USB Driver

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