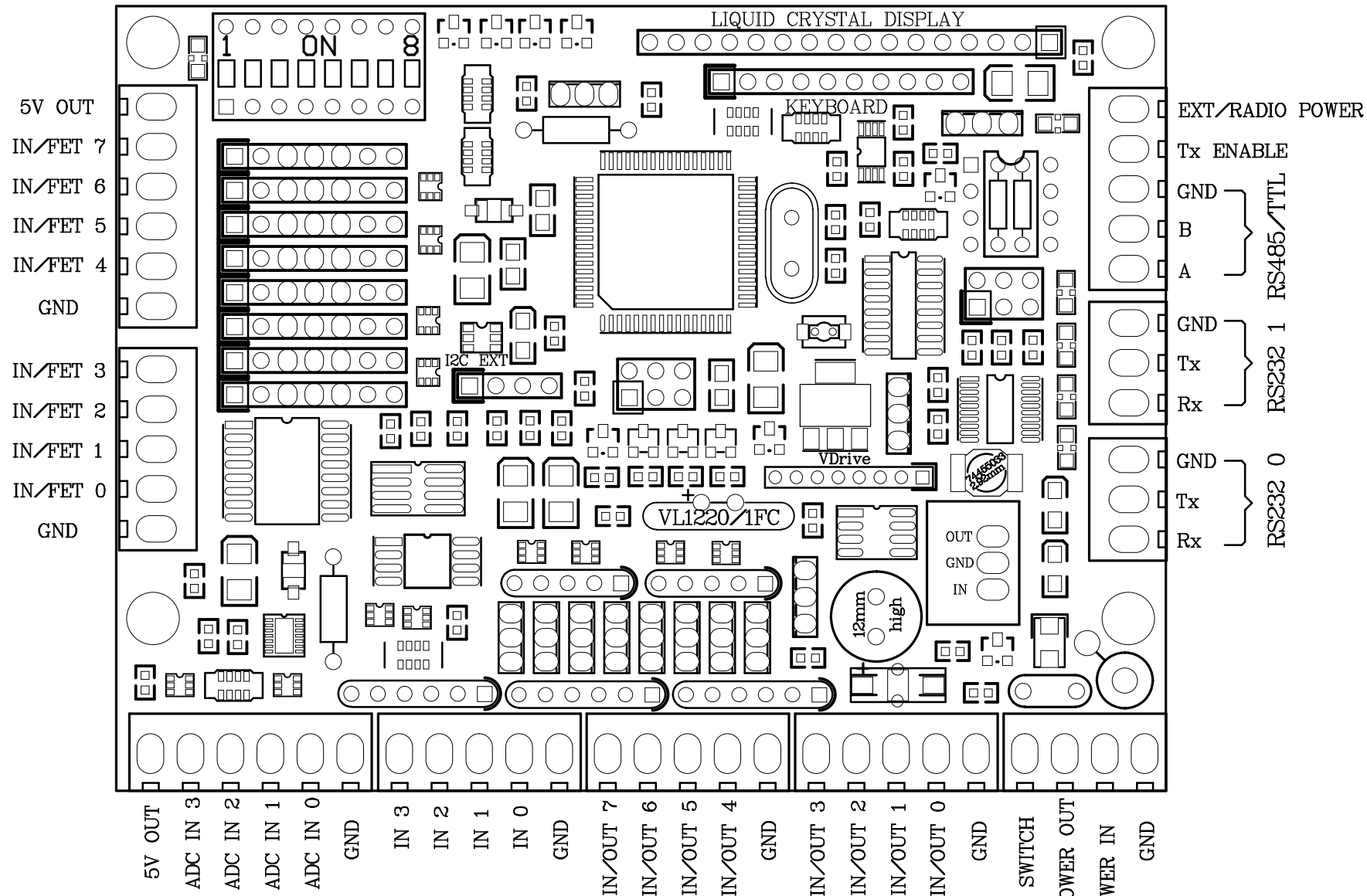


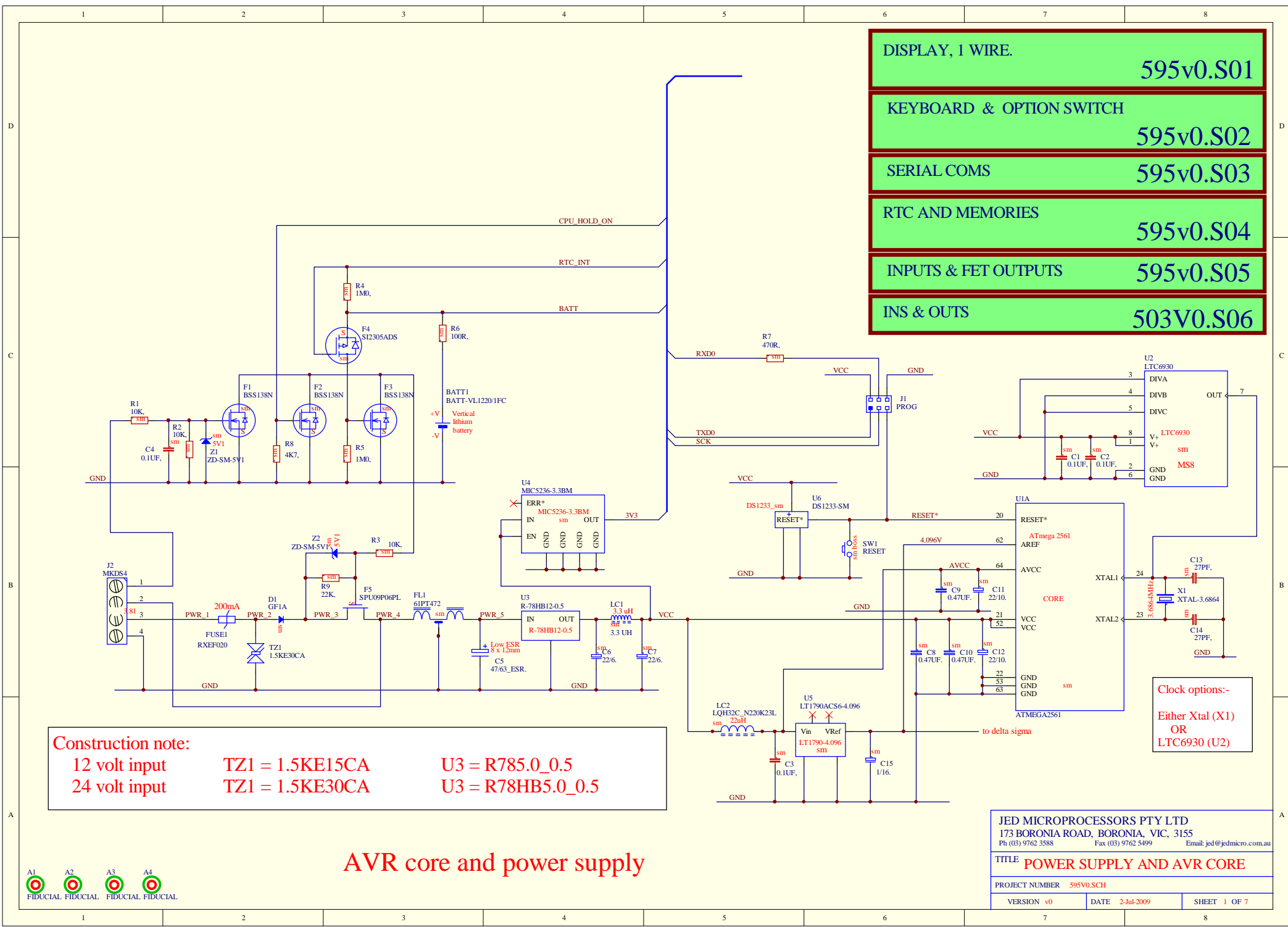
595V0



JED MICROPROCESSORS PTY LTD
 BORONIA VICTORIA 3155

Board title 595v0.pcb
 Layer Mechanical Layer 1
 Date 2-Jul-2009

○ ○ ○ ○



DISPLAY, 1 WIRE.	595v0.S01
KEYBOARD & OPTION SWITCH	595v0.S02
SERIAL COMS	595v0.S03
RTC AND MEMORIES	595v0.S04
INPUTS & FET OUTPUTS	595v0.S05
INS & OUTS	503V0.S06

Construction note:

12 volt input
24 volt input

TZ1 = 1.5KE15CA
TZ1 = 1.5KE30CA

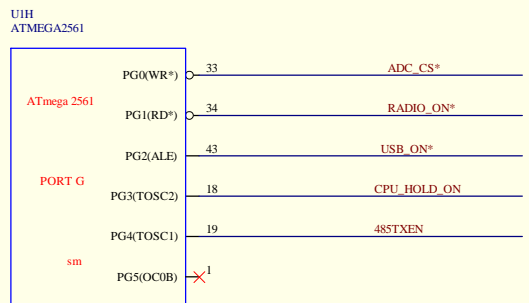
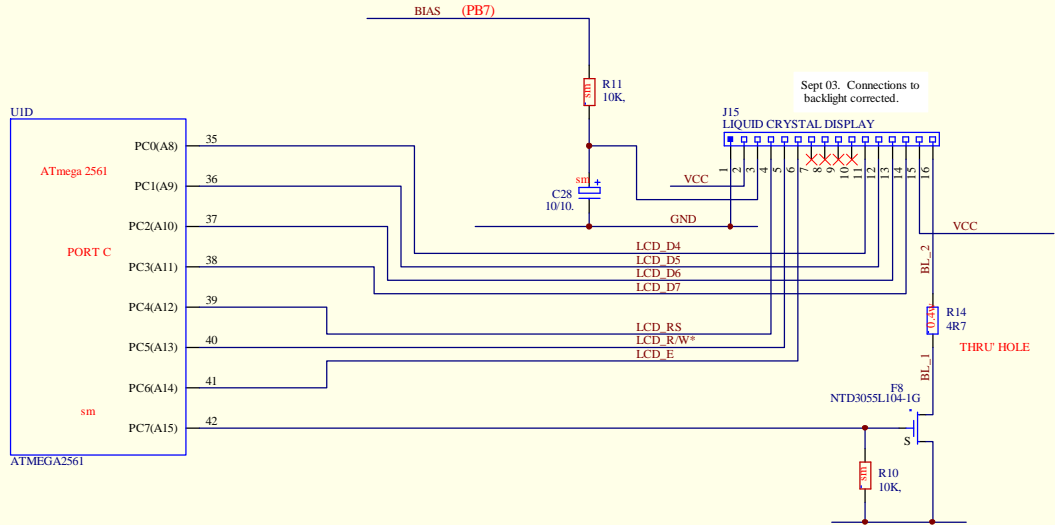
U3 = R785.0_0.5
U3 = R78HB5.0_0.5

Clock options:-
Either Xtal (X1)
OR
LTC6930 (U2)

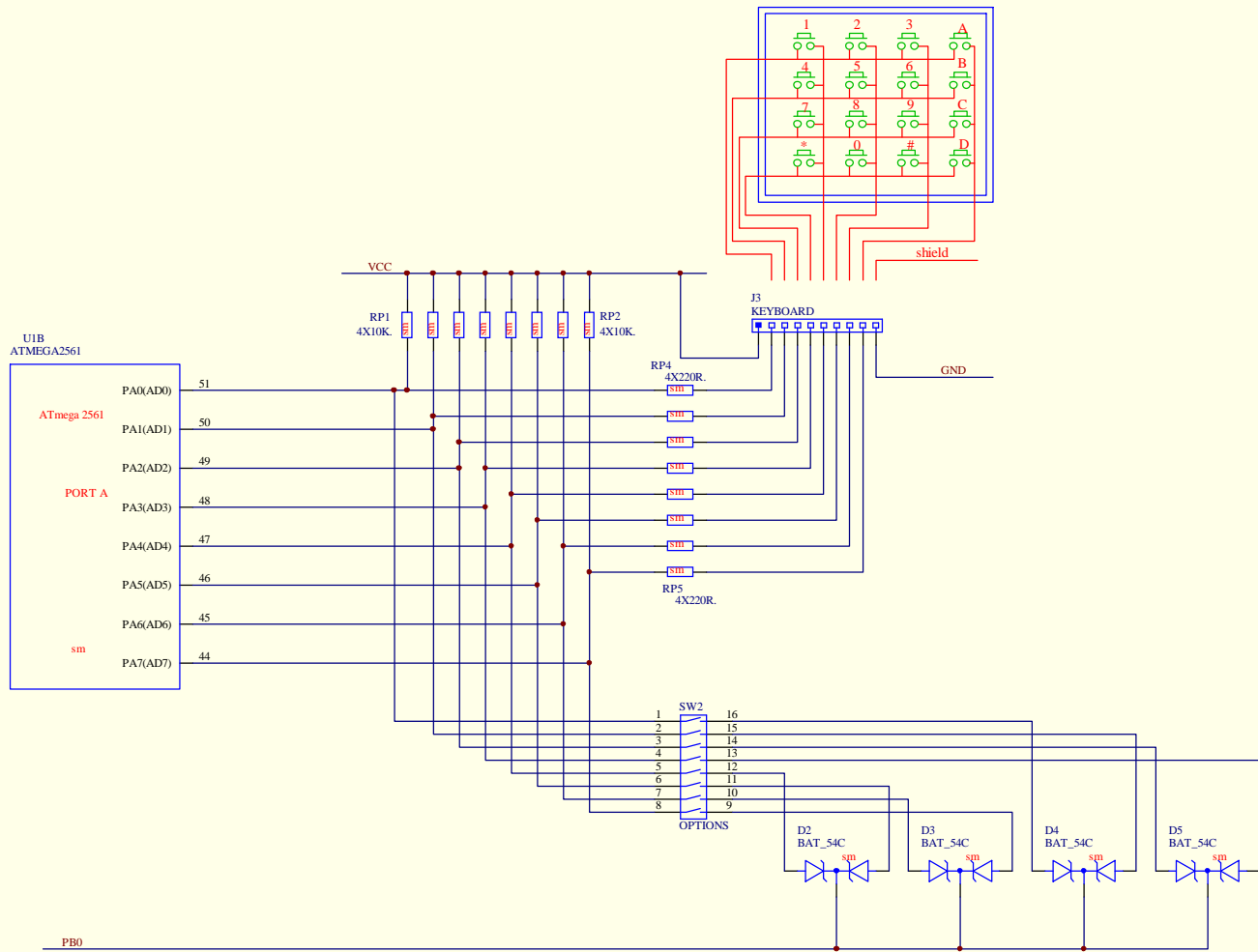
AVR core and power supply



JED MICROPROCESSORS PTY LTD 173 BORONIA ROAD, BORONIA, VIC, 3155 Ph (03) 9762 3588 Fax (03) 9762 5499 Email: jed@jedmicro.com.au		
TITLE POWER SUPPLY AND AVR CORE		
PROJECT NUMBER	595V0.SCH	
VERSION	v0	DATE 2-Jul-2009 SHEET 1 OF 7



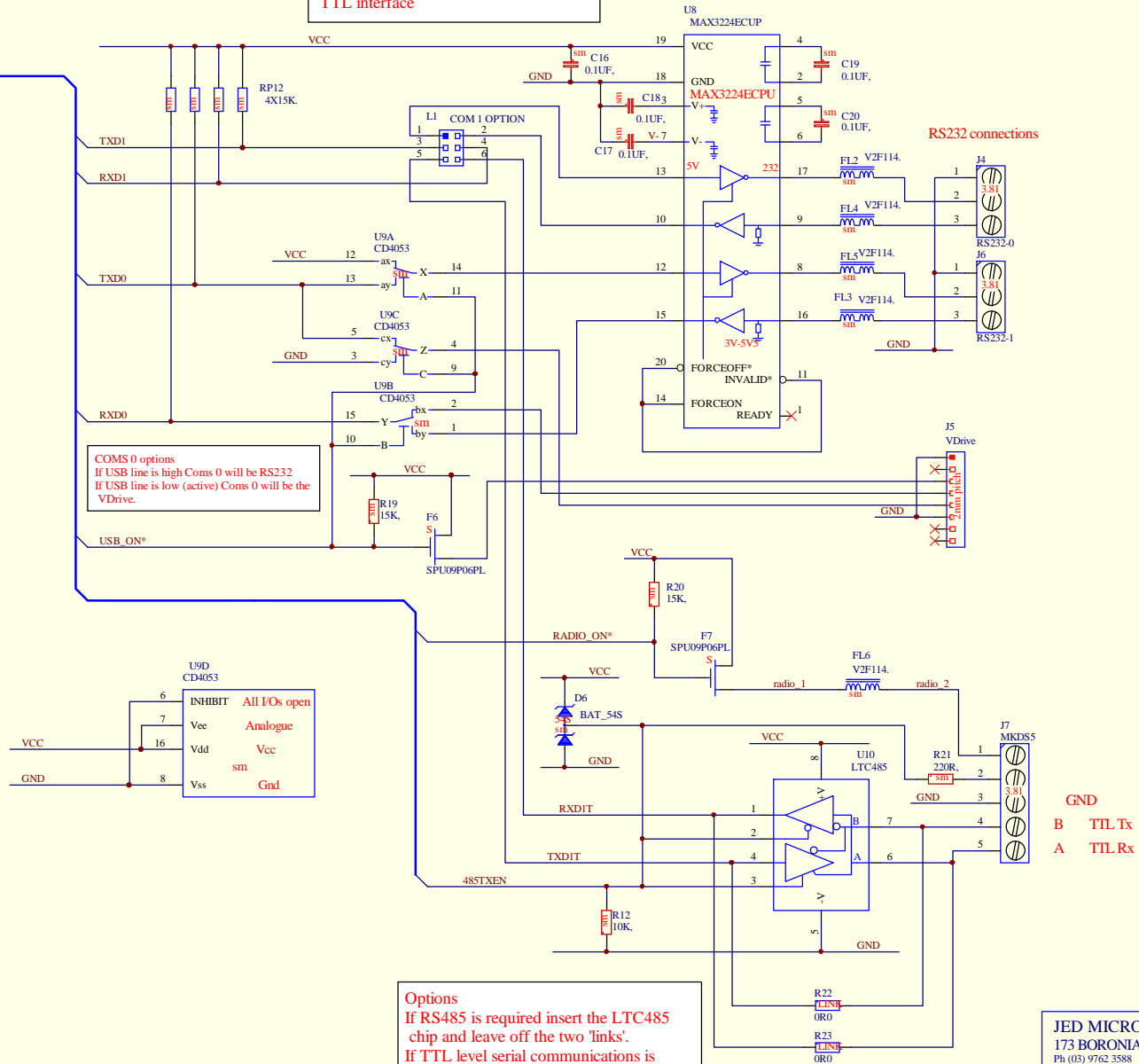
JED MICROPROCESSORS PTY LTD 173 BORONIA ROAD, BORONIA, VIC, 3155 Ph (03) 9762 3588 Fax (03) 9762 5499 Email: jed@jedmicro.com.au		
TITLE LCD 1 WIRE		
PROJECT NUMBER 595V0.S01		
VERSION v0	DATE 2-Jul-2009	SHEET 2 OF 7



JED MICROPROCESSORS PTY LTD 173 BORONIA ROAD, BORONIA, VIC, 3155 Ph (03) 9762 3588 Fax (03) 9762 5499 Email: jed@jedmicro.com.au		
TITLE KEYBOARD & OPTION SWITCH		
PROJECT NUMBER 595V0.S02		
VERSION v0	DATE 2-Jul-2009	SHEET 3 OF 7

COM 1 OPTIONS

Link 1-3 & 2-4 gives RS232 interface
 Link 3-5 & 4-6 gives RS485 interface or
 TTL interface



COMS 0 options
 If USB line is high Coms 0 will be RS232
 If USB line is low (active) Coms 0 will be the VDrive.

U9D CD4053
 6 INHIBIT All I/Os open
 7 Vee Analogue
 16 Vcc Vcc
 sm
 8 Vss Gnd

Options
 If RS485 is required insert the LTC485 chip and leave off the two 'links'.
 If TTL level serial communications is required leave off LTC485 and add the two 'links'.

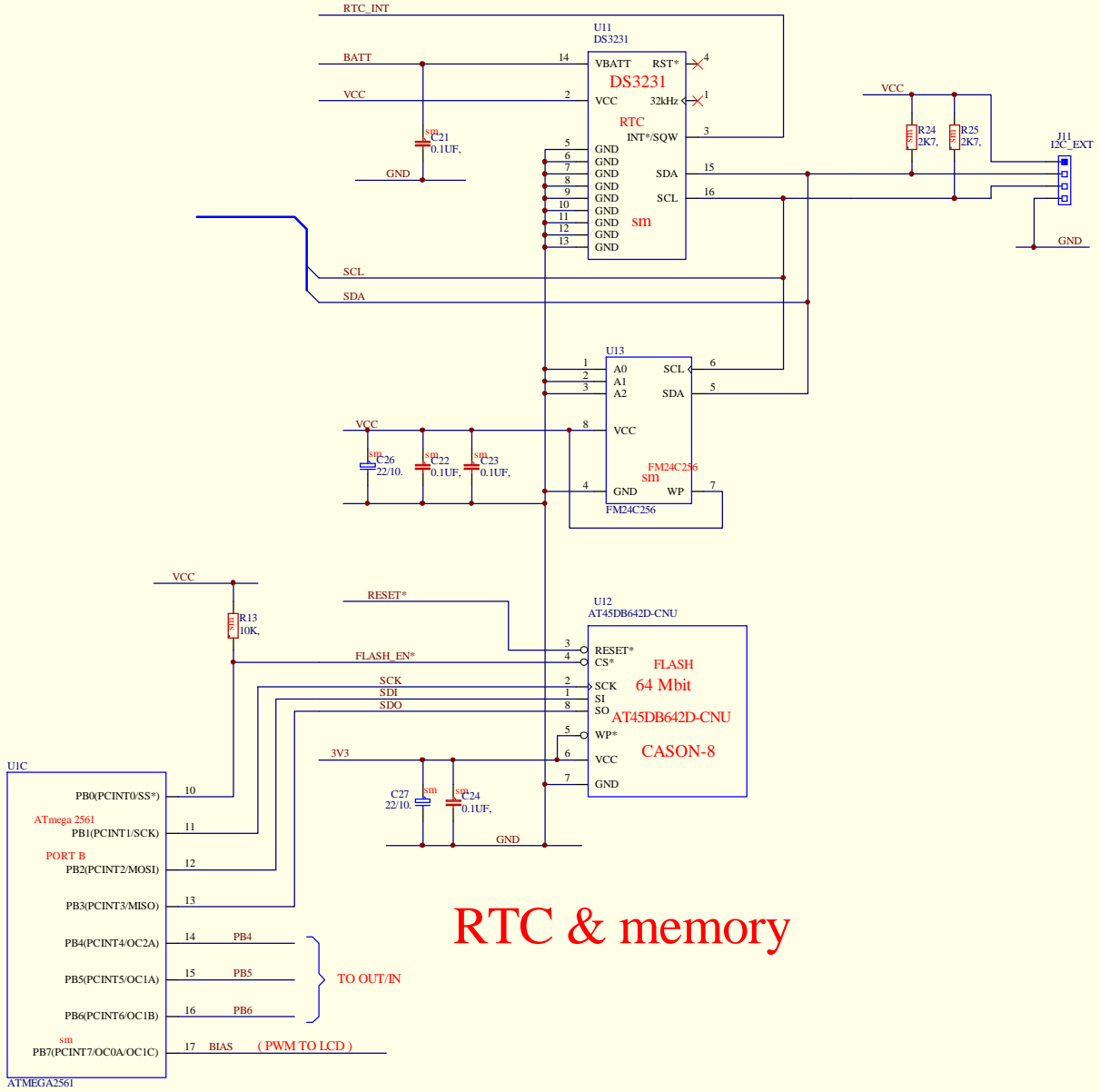
GND
 B TTL Tx
 A TTL Rx

JED MICROPROCESSORS PTY LTD
 173 BORONIA ROAD, BORONIA, VIC, 3155
 Ph (03) 9762 3588 Fax (03) 9762 5499 Email: jed@jedmicro.com.au

TITLE SERIAL COMS

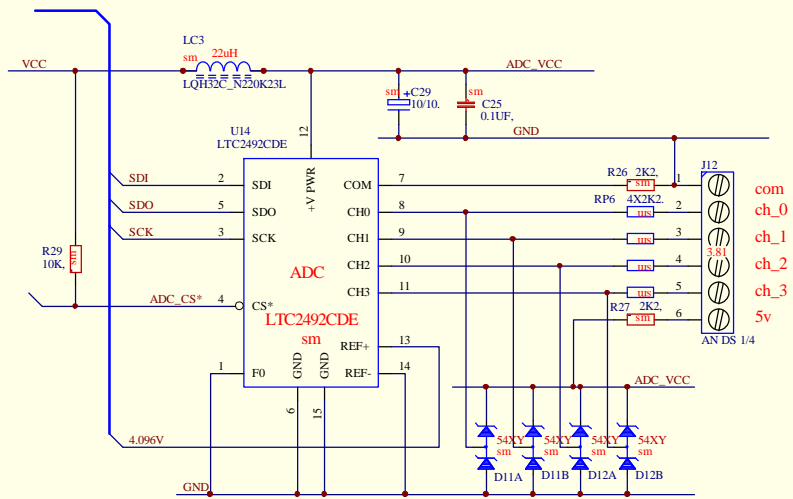
PROJECT NUMBER 595V0.S03

VERSION v0	DATE 2-Jul-2009	SHEET 4 OF 7
------------	-----------------	--------------



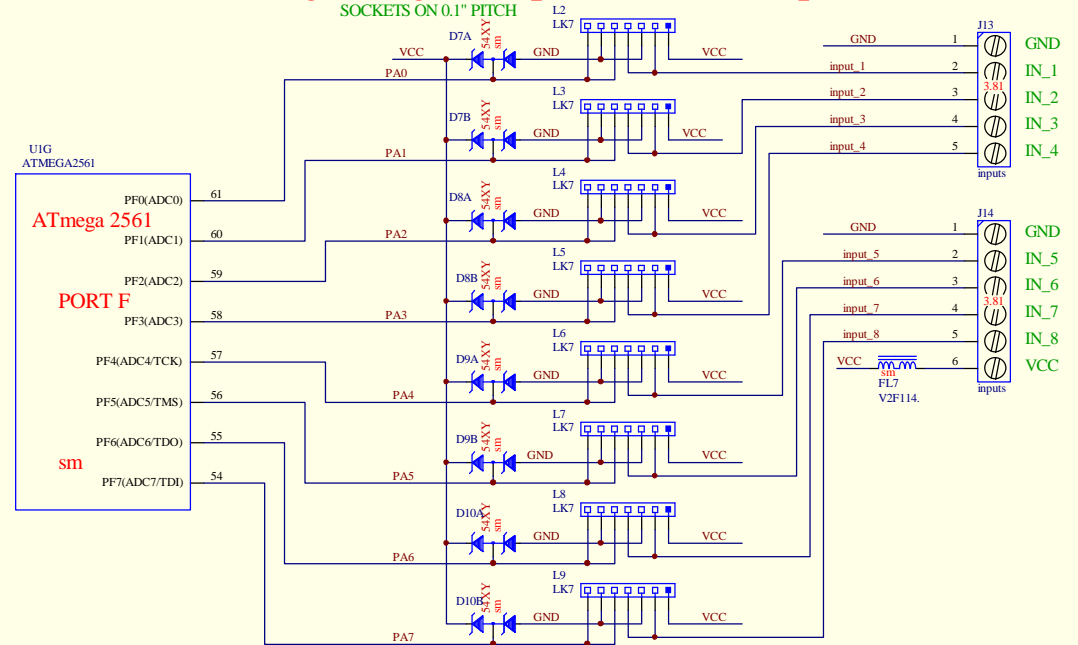
RTC & memory

JED MICROPROCESSORS PTY LTD 173 BORONIA ROAD, BORONIA, VIC, 3155 Ph (03) 9762 3588 Fax (03) 9762 5499 Email: jed@jedmicro.com.au		
TITLE RTC AND MEMORIES		
PROJECT NUMBER 595V0.S04		
VERSION v0	DATE 2-Jul-2009	SHEET 5 OF 7

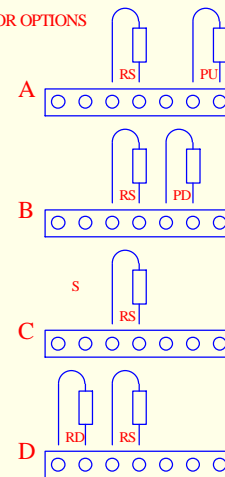


DELTA-SIGMA ADC

Analogue/digital inputs & FET outputs

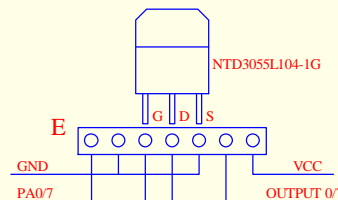
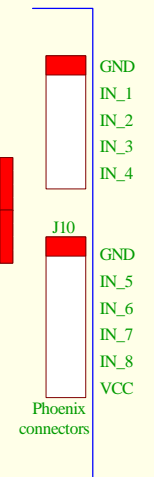


RESISTOR OPTIONS



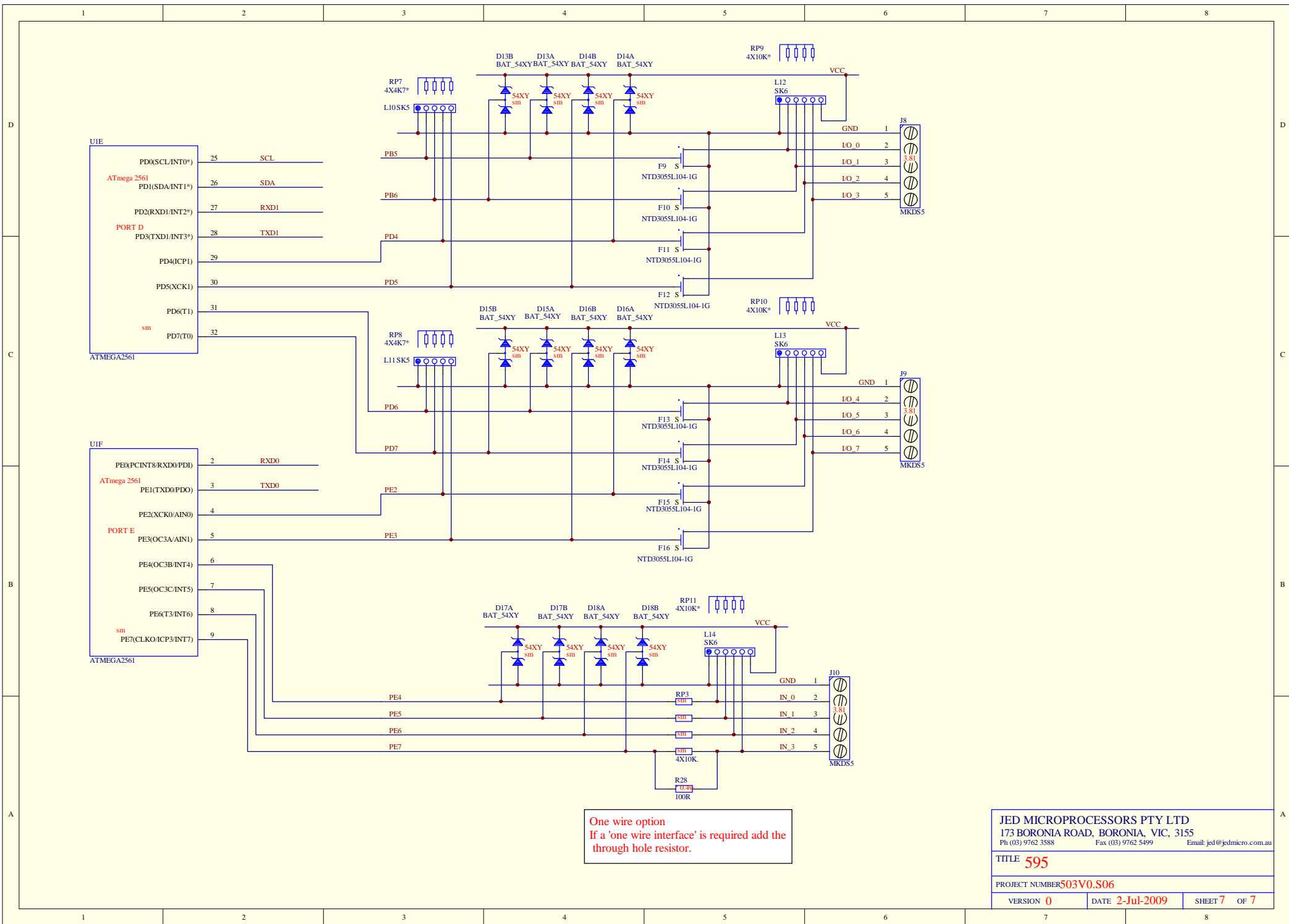
Analogue and digital inputs.
 Resistor RS is the input protection.
 A = An active low digital input or for resistive transducer to ground.
 B = An active high digital input or analogue termination resistor to ground (eg 200R for 4 to 20mA loop)
 C = A high impedance analogue input 0 to 5 volts
 D = A voltage divider analogue input.
 Voltage to AVR = $RD \times Vin / (RS + RD)$
 E = A FET driven output

Option selection area.



Physical layout of components

JED MICROPROCESSORS PTY LTD 173 BORONIA ROAD, BORONIA, VIC, 3155 Ph (03) 9762 3588 Fax (03) 9762 5499 Email: jed@jedmicro.com.au		
TITLE DELTA ADC & I/O		
PROJECT NUMBER	S95V0.S05	
VERSION	v0	DATE
		2-Jul-2009
		SHEET
		6 OF 7



One wire option
 If a 'one wire interface' is required add the through hole resistor.

JED MICROPROCESSORS PTY LTD
 173 BORONIA ROAD, BORONIA, VIC, 3155
 Ph (03) 9762 3588 Fax (03) 9762 5499 Email: jed@jedmicro.com.au

TITLE **595**

PROJECT NUMBER 503V0.S06

VERSION 0	DATE 2-Jul-2009	SHEET 7 OF 7
-----------	-----------------	--------------