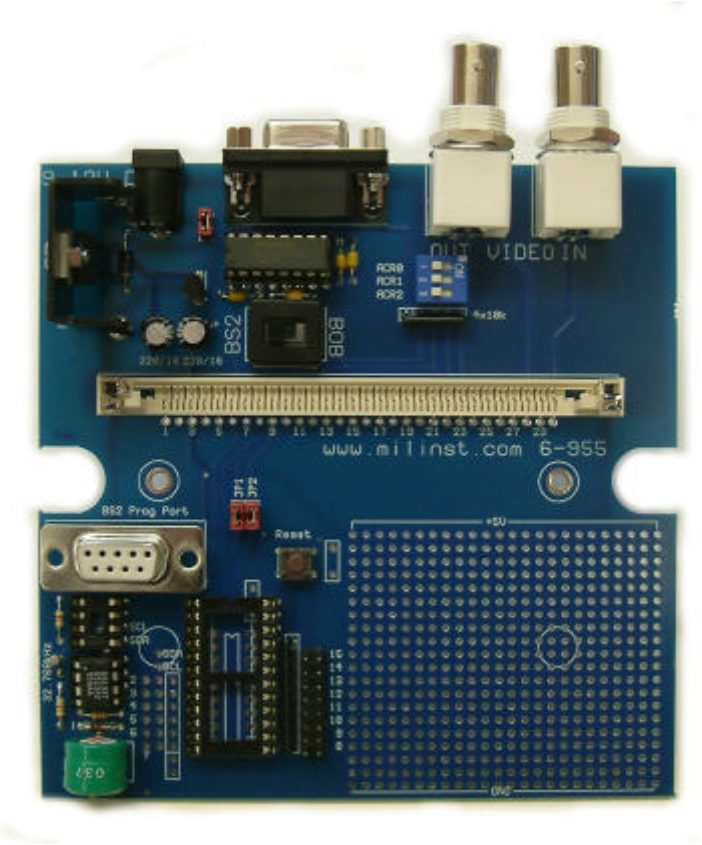
MILFORD INSTRUMENTS Limited

Rev 1.0 8/10/07

BOB-4 Development Board, Part # 6-955



Designed for use with the SIMM version of the BOB-4 Video overlay module (part # 6-954), the BOB-4 Development board allows the user to quickly develop a stand alone video overlay module.
The development board is based around the Parallax Basic Stamp 2 (24-pin) modules and includes a real-time I2C clock module, serial eeprom socket and a development area for additional components. The board supports RS232 level shifting and incoming data may be switched to either the Stamp2 or directly to the BOB-4 module.
Supplied with sample Stamp2 ROV-type routines to demonstrate the use of the real-time clock, receiving and sorting of incoming data and on-screen positioning of data and graphics.
A dedicated Stamp2 programming port is provided.

The BOB-4 and Basic Stamp must be purchased separately.

Support Chips:
Supplied with Dallas DS1337 real time clock chip with battery backup.
Provision for Parallax Stamp2 chip (BS2P-24 recommended).
Provision for I2C serial eeprom chip.

Video:
Video Input/Output is via BNC sockets.

Reg Office: Pointer Farm, Great North Rd, Peckfield, South Milford, LEEDS LS25 5LH United Kingdom
Reg Number: 4222329 Tel 01977 683665 *Fax* 01977 681465 www.milinst.com

Miscellaneous:
DIP switches to select the BOB-4 baud rate,
Provision for front panel ON/OFF switch.
50 x 60mm strip development board area is included on the board for customer application circuitry.

Power Supply:
The board requires a 9 to12 Vdc @ 500ma power supply centre positive via 2.1mm socket. (Nominal current <160ma)

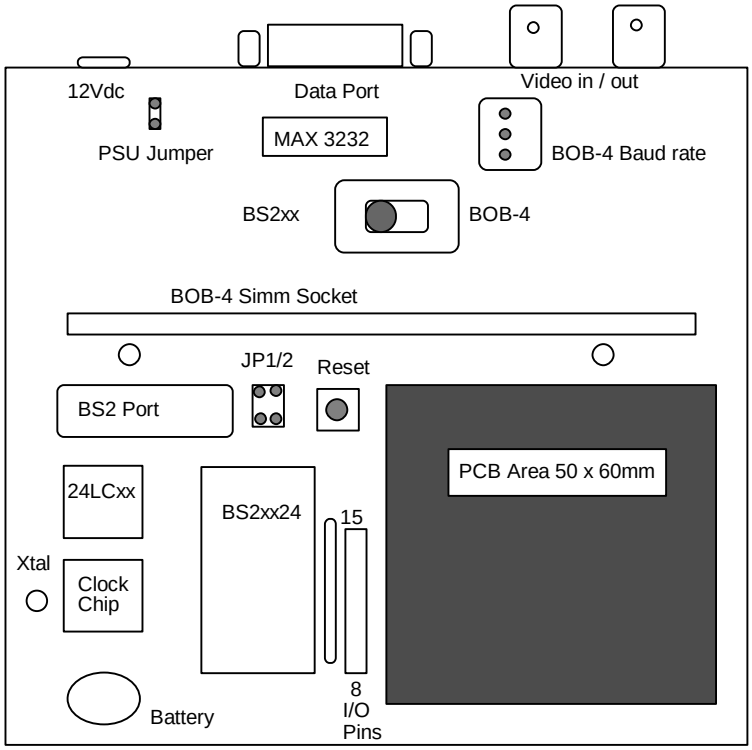
Pin Connections:

BS2 pins:	**BOB-4/Clock/Eeprom/MAX 3232**
P0 SDA	To I2C Pins: DS1337 / Eeprom P5
P1 SCL	To I2C Pins: DS1337 / Eeprom P6
P2 DATA PORT IN	To RS232 Pin 3
P3 DATA PORT OUT	To RS232 Pin 2
P4 BOB-4 OUT	BOB-4 Pin 8 TXD Via JP1
P5 BOB-4 IN	BOB-4 Pin 9 RXD Via JP2

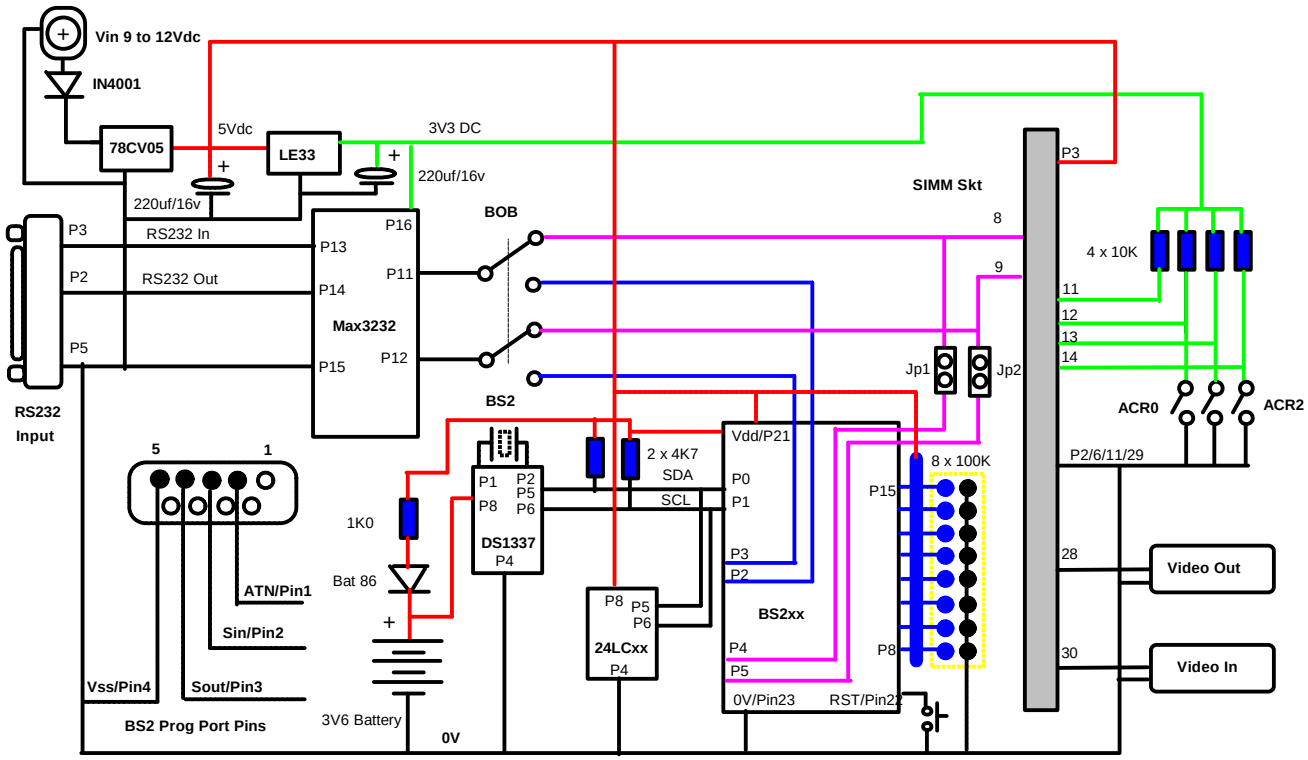
P6/7 FREE
P8 TO P15 General purpose input output pins with 100K pull-up resistors.
Please refer to schematic for full connection details.

BS2 Demonstration programmes are available from www.milinst.com .

PCB Layout:



BOB-4 Development Board Schematic



Optional Case with pre-drilled panel

Fitted with the BOB-4, BS2P-24 and cased