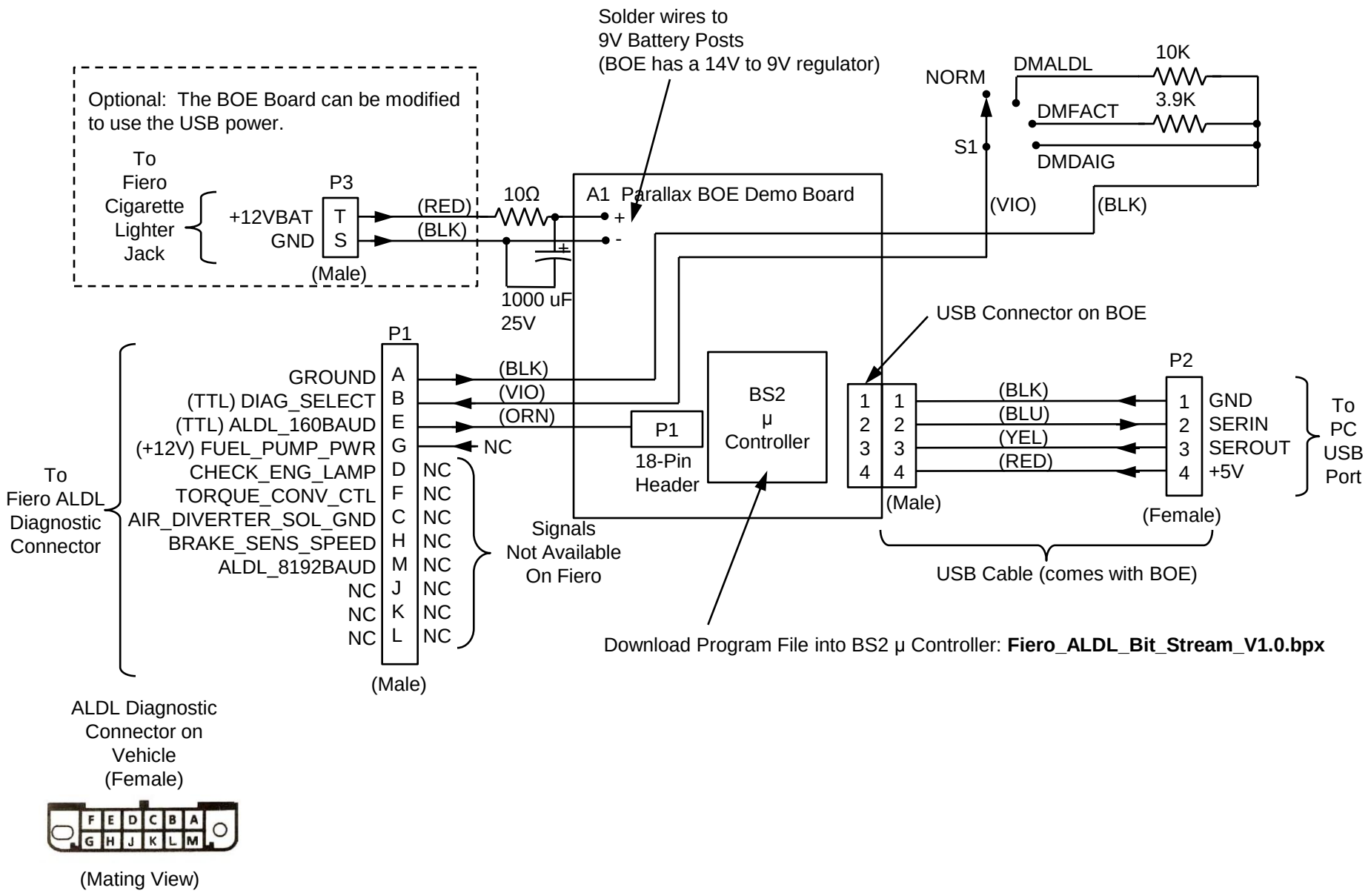
Fiero ALDL Adapter Schematic



Fiero ALDL Adapter Basic Stamp PBasic Code

```
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'
' Fiero_ALDL_Bit_Stream_V1.0.bpx
' Paul Romsky
' 12 AUG 2011
'
' Sample ALDL bit stream, convert to ASCII, and send over USB to be
' parsed by a GUI.
'
' This module provides the control code for the Parallax BS2 Pstamp
' Microcontroller Board of Education prototyping board.  The BS2 Microcontroller
' and the board are used to provide a simple interface to the Fiero Test Connector
' which uses the General Motors (GM) Assembly Line Diagnostic Link (ALDL)
' protocol - which is a predecessor to the On-Board Diagnostics I and II
' (OBD-I and OBD-II) protocols.
'
' Revision History
'
' Ver Date        Author         Description
' --- ----------- -------------- ---------------------------------------------
' 1.0 12 AUG 2011 P. Romsky      Initial coding
'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

'
' Pstamp Comment-Directives
'
' {$STAMP BS2px}
' {$PBASIC 2.5}
' {$PORT COM3}


'
' EEPROM Data
'
Header DATA @$0000, "Fiero ALDL Bit Stream V1.0 Copyright (c) 12 AUG 2011 ",
                    "Paul A. Romsky Jr."
Nulls  DATA (9)


'
' Pin Assignments
'
ALDL PIN 1


'
' Pin Directions
'
INPUT ALDL

'
'                         Start      Data       Stop
' 160 Baud 1 bit time = 0.500 ms + 4.750 ms + 1.000 ms = 6.250 ms
' Sample Point = 2.875 ms
' Mid Point    = 3.125 ms
'

'
' Main Entry Point
'
Main:
DO
  DO
    ' Wait for signal to go low (Start)
  LOOP WHILE (ALDL = 1)

  PAUSE 3 ' Delay 3 ms for nearest possible sample of Mid Point

  IF (ALDL = 0) THEN
    ' Signal is still low - Data Bit detected is a '1'
    DEBUG "1"
    DO
      ' Wait for signal to go back high (Stop)
    LOOP WHILE (ALDL = 0)
  ELSE
    ' Signal went high - Data Bit detected is a '0'
    DEBUG "0"
  ENDIF
LOOP


'
' End
'
```

Fiero ALDL Monitor GUI Main Screen