

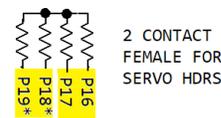
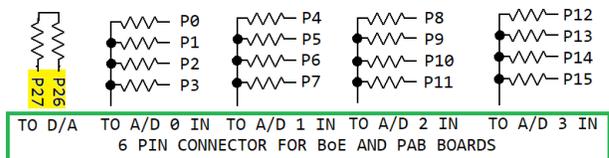
Here is a simple and relatively flexible test board for the BoE and PAB boards. The test board plugs in to the 16 pin header of the BoE/PAB board to be tested.

A cable with a 6 pin connector plugs in to the D/A and A/D header for testing the adc input and d/a output pins.

Two 2 contact female connectors are used for connecting to servo pins on the BoE and PAB boards. One is needed for P16/P17 on the PAB. Both are required for P16/P17 and P18/P19 on the BoE board.

The circuit can be built on a small breadboard using 6 sip resistor networks, one 16 pin header, one 6 pin header, and two 2 contact female connectors. It can be used to test each of the 20/22 accessible pin as outputs and inputs, and can then test the four adc channels with multiple voltage values by using the resistors as a coarse dac. Input voltages would be 0, 25, 50, 75, and 100 percent of the 3.3V power supply.

Propeller BoE (#32900)	Propeller Activity Board (#32910)	Propeller Activity Board WX (#32912)
P0-P15 J2 header P14-P19 servo hdr. P20-P21 mic s/d adc P22-P25 micro sd P26-P27 D/A hdr.	P0-P15 sip hdr. P12-P17 servo hdr. P18-P21 ADC P22-P25 micro sd P26-P27 D/A hdr.	P0-P15 sip hdr. P12-P17 servo hdr. P18-P21 ADC P22-P25 micro sd P26-P27 D/A hdr.
P0-P15 J2 header	P0-P15 J2 header	P0-P15 J2 header
P16-P19 servo hdr.	P16-P17 servo hdr.	P16-P17 servo hdr.
P20-P21 mic sig/delta	P18-P21 ADC	P18-P21 ADC
P22-P25 micro sd	P22-P25 micro sd	P22-P25 micro sd
P26-P27 D/A hdr.	P26-P27 D/A hdr.	P26-P27 D/A hdr.
22/26 pin access	20/24 pin access	20/24 pin access



* FOR BoE ONLY
NOT USED ON PAB
OR PAB WX

Here is a composite screen shot of the PST output for the pin test and the adc test.

```
Testing pin group 1 ( P0-P3 )
Output pin #0 No errors
Output pin #1 No errors
Output pin #2 No errors
Output pin #3 No errors

Testing pin group 2 ( P4-P7 )
Output pin #4 No errors
Output pin #5 No errors
Output pin #6 No errors
Output pin #7 No errors

Testing pin group 3 ( P8-P11 )
Output pin #8 No errors
Output pin #9 No errors
Output pin #10 No errors
Output pin #11 No errors

Testing pin group 4 ( P12-P15 )
Output pin #12 No errors
Output pin #13 No errors
Output pin #14 No errors
Output pin #15 No errors

Testing pin group 5 ( P16 - P17 )
Output pin #16 No errors
Output pin #17 No errors

Testing pin group 6 ( P26 - P27 )
Output pin #26 No errors
Output pin #27 No errors

Testing ADC inputs
Ch 0 Ch 1 Ch 2 Ch 3
2644 0 2648 2
1979 656 1977 651
1317 1313 1323 1318
659 1979 658 1975
5 2646 1 2642

2650 4 2643 0
1981 661 1996 652
1316 1326 1336 1314
658 1986 659 1978
6 2650 0 2662

2643 0 2644 2
1980 654 1976 652
1325 1311 1330 1311
667 1975 669 1977
1 2644 0 2643

Testing pin group 1 ( P0-P3 )
Output pin #0 No errors
Output pin #1 No errors
Output pin #2 No errors
Output pin #3 No errors
```