BSPD V2

Focus on noise elimination, differential signaling

Two boards

Main board and sensor interface board, interface board to read current sensor and provide stable offset reference to send back to main board differential.

# Main board connections

* Power
* Ground
* CURRENT\_DIFFERENTIAL1
* CURRENT\_DIFFERENTIAL2
* BPS1\_SIG
* BPS1\_PWR
* BPS1\_GND
* BPS2\_SIG
* BPS2\_PWR
* BPS2\_GND
* BSPD\_OK

# Current board connections

* Power
* Ground
* CURRENT\_DIFFERENTIAL1
* CURRENT\_DIFFERENTIAL2
* CURRENT\_SENSE

# Current Sensor

Channel 1

+- 75 A

2.5 V offset

G = 26.67 m V/A

Voffset + G x Ip = Vout

@12.5 A Vout = 2.83 V