

External Power Supply (9V-36V)

JP13:
Pins 1-2 for USB Powered
Pins 2-3 for Bat. Powered

MECH1
1

MECH2
1

External IDC Connectors

J1

Signal	Pin	Signal	Pin
TX/RX-3v3_1	1	TX/RX-3v3_2	2
TX/RX-3v3_3	3	TX/RX-3v3_4	4
TX/RX-3v3_5	5	TX/RX-3v3_6	6
TX/RX-3v3_7	7	TX/RX-3v3_8	8
TX/RX-3v3_9	9	TX/RX-3v3_10	10
TX/RX-3v3_11	11	TX/RX-3v3_12	12
ADC_0	15	ADC_1	16
ADC_2	17	ADC_3	18
5V_DSP	19	GND	20
IO_1	21	IO_2	22
IO_3	23	IO_4	24
IO_5	25	IO_6	26
	27		28
	29		30
	31		32
ADC_4	33	ADC_5	34
ADC_6	35	ADC_7	36
5V_DSP	37	GND	38
	39		40

SFH11-PBPC-D20-ST-BK

J2

Signal	Pin	Signal	Pin
ADC_0	1	ADC_1	2
ADC_2	3	ADC_3	4
ADC_4	5	ADC_5	6
ADC_6	7	ADC_7	8
IO_1	9	IO_2	10
IO_3	11	IO_4	12
IO_5	13	IO_6	14
5V	15	GND	16

AHW116G-02002-T

Zener-Based Level Shifting

Fiber Optic TX Drivers

The schematic shows a 12-channel fiber optic TX driver. The top section is a common-mode filter network consisting of capacitors C13 through C24. C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, and C24 are all 0.1uF. C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, and C24 are all 1uF. The network is connected to a 5V supply and GND.

The bottom section shows 12 identical driver channels, labeled U13 through U18. Each channel is a TC427COA driver. The inputs are TX/RX_1 through TX/RX_12. The outputs are TXD_1 through TXD_12. The VDD pin is connected to 5V. The GND pin is connected to GND. The NC pin is connected to GND. The driver is configured as a push-pull output driver.

[illegible]