

## SDR2-CF and SDR2-OEM-CF Control Port (J4)

### API Port (J4)

Contact	Function	Direction	Wire Color
1	V <sub>DD</sub> (3.3 VDC)		Red
2	GND (0 VDC)		Black
3	$\overline{\text{REC\_BUTTON}}$	input	Blue
4	$\overline{\text{REC\_TOGGLE}}$	input	Grey
5	$\overline{\text{FAULT}}$	output	Yellow
6	no connect		-
7	$\overline{\text{DATA}}$	output	Orange
8	$\overline{\text{RECORD}}$	output	Green
9	V <sub>DD</sub> (3.3 VDC)		-
10	GND (0 VDC)		-

J4 mating plug (shell): Hirose DF11-10DS-2C (Digi-Key part number H2023-ND)

For use with DF11 crimp contacts e.g. DF11-2428SCA (Digi-Key part number H2300-ND) or pre-crimped wires (Digi-Key part number H3BXG-101LL-CW where LL=length in inches, C=color code, W=wire gauge code).

### API Port Functions

Function	Description
V <sub>DD</sub> (3.3 VDC)	Regulated low-current voltage output. Use for deasserting active-low inputs and driving LED indicator outputs.
GND (0 VDC)	Signal ground. Use for asserting active-low inputs.
$\overline{\text{REC\_BUTTON}}$	Momentary record input. Function is similar to front-panel record button. To use, connect a momentary pushbutton switch between this contact and GND.
$\overline{\text{REC\_TOGGLE}}$	Force-record input. To use, connect a toggle switch between this contact and GND. When closed, the SDR2 will always enter record mode.
$\overline{\text{FAULT}}$	Fault condition indicator output. Function is similar to the front-panel Fault indicator. When low, indicates an unrecoverable error has occurred in the SDR2. To use, connect an LED's cathode to this contact and its anode to V <sub>DD</sub> via a current-limiting resistor. Limit current to 30 mA max.
$\overline{\text{DATA}}$	Data indicator output. Function is similar to the front-panel Data indicator. Pulses momentarily low to indicate data reception in the SDR2. To use, connect an LED's cathode to this contact and its anode to V <sub>DD</sub> via a current-limiting resistor. Limit current to 30 mA max.
$\overline{\text{RECORD}}$	Recording indicator output. Function is similar to the front-panel Record indicator. Driven low when the SDR2 is recording data to an open file. To use, connect an LED's cathode to this contact and its anode to V <sub>DD</sub> via a current-limiting resistor. Limit current to 30 mA max.

Logic Levels: 3.3 VDC CMOS (inputs are connected to 3.3 VDC via 4.7kΩ pullup resistors)

Note: Do not use the REC\_BUTTON and REC\_TOGGLE functions simultaneously.