## Full list of desired connections on FIB:

- 1. Serial powering (from Control Room):
  - I\_in.
  - I\_out.
- 2. CB-to-FIB:
  - 3 x diff pair for FPC S/Cs (6 wires).
  - VTRx+ power (2V5 domains could be supplied by 1 source, GND could be shared for all domains) (3-6 wires).
    - 1V2 Tx domian (VCCT1V2).
    - 2V5 Tx domain (VCCT2V5).
    - 2V5 Rx domain (VCCR2V5).
    - GND needed.
  - VTRx+ I2C (share GND with power domains?) (2-3 wires).
    - SCL.
    - SDA.
  - Laser driver controls (2 wires).
    - Reset.
    - Disable.
  - RSSI (Rx current monitor) (1 wire).
  - VTRx+ thermistor (2 wires).
    - 2 terminal interface.
  - Voltage sense (for VTRx+ domains) (3-4 wires).
    - 1V2 domain.
    - Shared or separate 2V5 domains?
    - GND sense (to account for V-shift on both rails).

## 2 SP wires needed.

Minimum of 19 wires (up to 24) between CB and FIB.

• Minimum only includes 1 x GND wire (we probably want more)!