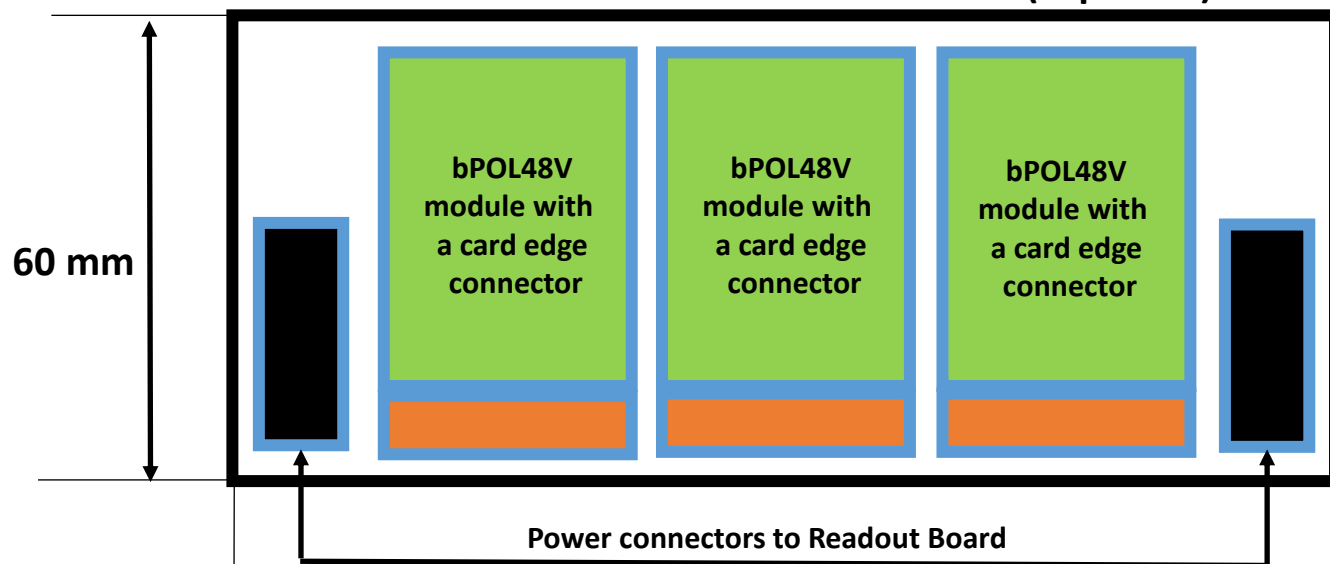
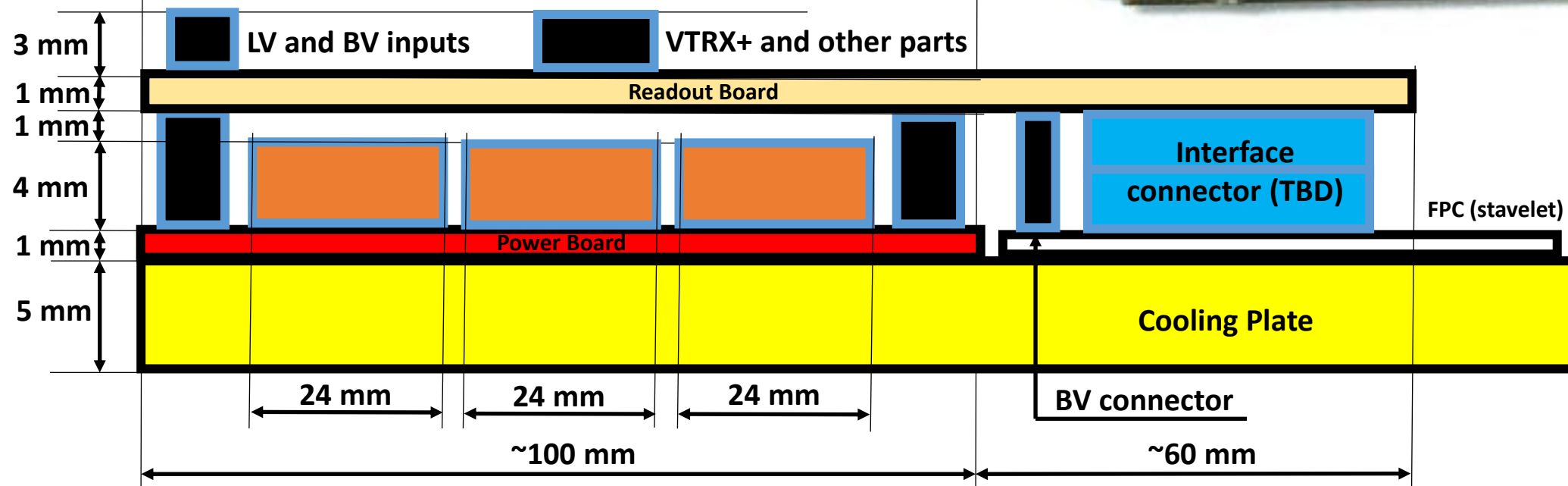


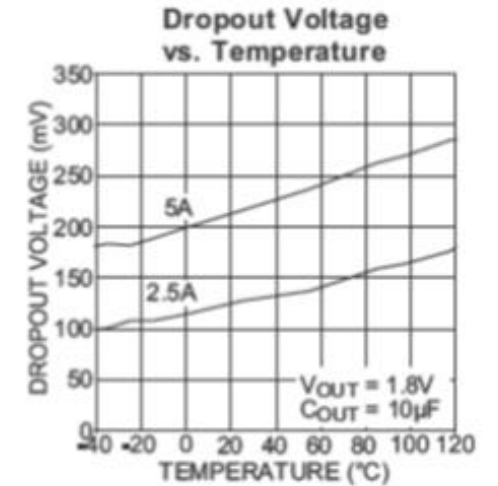
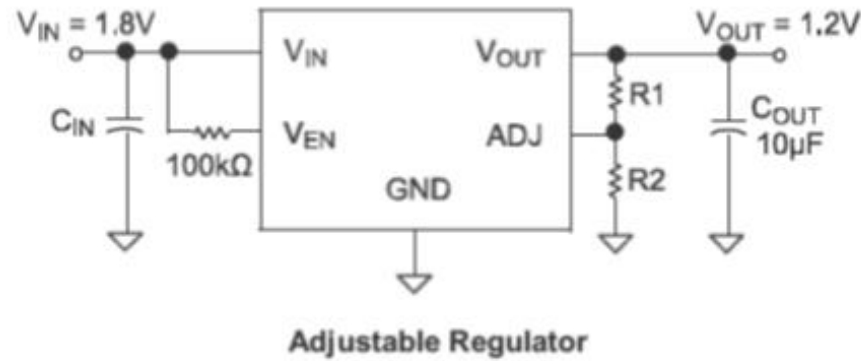
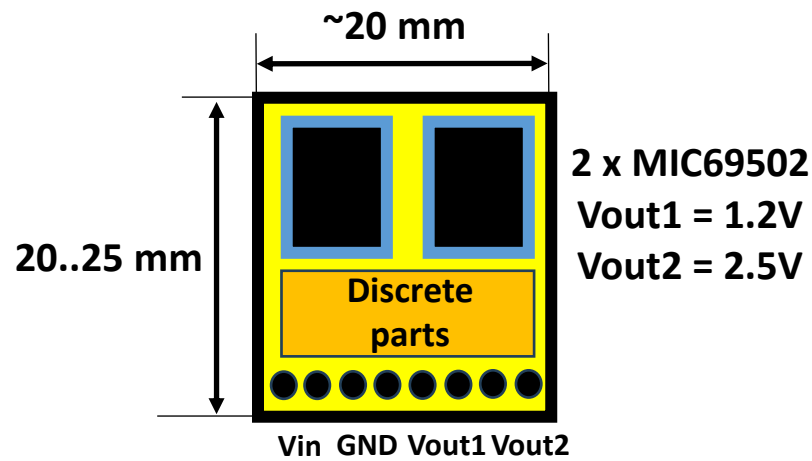
Power Board with three CERN Modules (Top View)



CERN bPOL48V based Power Module



BTOF Service Hybrid (Option 1 with CERN Power Modules, **all dimensions need to be verified with real modules**)



- $V_{in} = 1.65V \dots 5.5V$
- $V_{out} > 0.5V$; adjustable
- $I_{out} < 5A$
- Efficiency = V_{out}/V_{in}
- Radiation tolerant (OK TID<30kRad)

$$V_{OUT} = 0.5 \times \left(\frac{R_1}{R_2} + 1 \right)$$

Questions for discussion:

1. FPC to RDO Interface connector (vendor and type, dimensions, pin assignment: data + LV)?
2. HV connector (vendor and type, location, size)?

Note: in the present scheme both connectors need to fit the space that is defined by two power connectors (PB to RDO, proposed Samtec UMTP-07-01.5-G-V-S-W-TR (PB) and UMPS-07-03.5-G-V-S-W-TR (RDO) with the total height of ~5mm)

3. LDO board (size, location, pcb requirements, attachment, cooling)?