

Discussion Session for
Electronics, Power distribution & Cooling

Electronics

current issue : LP2(1.5) w/ SAltro16

0. SAltro16 is working as it expected even at 40MHz sampling
1. Pad pitch related to MCM mounting for GEM module
discussed yesterday; seems to choose 1mm pitch & horiz. mount
2. Cooling of MCM
beam test : PP will not be used
TRACI-2
3. Power consumption
300W : TRACI-2 is enough?

Electronics

coming issue : more related to DBD

1. What is the goal of Electronics for DBD

S-Altro16

-> S-Altro64 ?

improvement of ADC
; less power consumption

-> GdSP

keeping good feature of SAltro
and sophisticated for MPGD

2. Parameter of GdSP

peaking time 50ns, 100ns, 200ns

#bit of ADC 10bit or less

MM prefer 100ns from resolution
is it true for 2-track separation?

how many channels?

3. MCM/Mezzanine or surface-mount

4. ALICE TPC upgrade

Let ALICE TPC group join into GdSP R&D ??

Power distribution / pulsing

taken care by chip/board
reduction factor

~60 ?

Big issue but nobody work on it @ ILD ?

need group(ILD) wide discussion

already done ?

need someone from LCTPC ?

Cooling

System is ready at CERN/NIKHEF prob. at KEK

how to cool MCM/PCB
rather complicated

thermal simulation is applicable

surface-mount ? for DBD