



Si-W ECAL

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LIR

Prospects for a future ASU

- “autonomous” unit
 - Including FFC & HV thanks to flex rigid technology
 - May include thermal drain thanks to SMI technology (substrat metallique isolé), limited to 2 layers of routing
- Optimized layout of edge connectors
 - Large pins for power supply (>10 amps !)
 - Only 2 connectors, one for each side
- 2 partitions for power (2 x 5 Amps)

Open discussion

- Mechanics for DIF and cables
- Power
 - Test of reliability (interconnects)
 - Test of power scheme (will start soon at LLR)

- Two ways

- PSU – cap – reg – cap
- PSU – reg – huge cap

With regulator 8 V – 3 V : $U=q/C$, $dU= di dt/C$
 $dU= 4 V$, $di=128*1 mA$, $dt=9 ms$: $C = 300 \mu F$

Direct powering : $U=q/C$, $dU= di dt/C$
 $dU= 100 mV$, $di=128*1 mA$, $dt=9 ms$: $C = 12 mF$
C

apa grande capacit  10 mF:

BZ05 case : 20mm x 15 mm x 6 mm