

Cables

Ecal						
Per 2/3 stave						
LDA		1 per column	5 per module			
			cable Ø	mm ²	Nbre	S total cm ²
LV to DC/DC 48>3,3 V	48V/2A	2*1,5mm ² of Cu	8	50,24	15	7,536
HV depletion Wafers 250 V/50µA par layer	250V/1,5mA		8	50,24	15	7,536
Signal/CC	flat multiwire cable 2,54 mm	0,05cm ² *10wires		50,67	15	7,6
Ground line		1 per module ?		210	3	6,3
			Total			28,972
	Where is the optical conversion of signal ?					
AHcal						
For one half octant						
per layer	(48 par 1/2 module)		cable Ø	mm ²	Nbre	S total cm ²
1Power	50v 0,3 µA per channel 276 ch/layer	2*5pins SAMTEC IPL1	10*2,54 mm	50,67	48	24,3216
1 HDMI			8	50,24	48	24,1152
Ground line		1 per Half octant		210	1	2,1
			Total			50,5368
TPC						
par way-out						
80 modules per endplate to be shared into 8 way-out						
			cable Ø	mm ²	Nbre	S total cm ²
central anode	50 KV				1	
µmégas power supply	1 KV multiwires 14	14*0,14 mm ²		1,4	8	
1 double optical fibre					8	0
1 low voltage 32 A				0,785	8	0,0628
Ground line				210	1	2,1
						2,1628

From R.Cornat

From
P.Goettlicher &
K.Gadow's
presentations

From
P.Colas &
D.Attié's
presentations