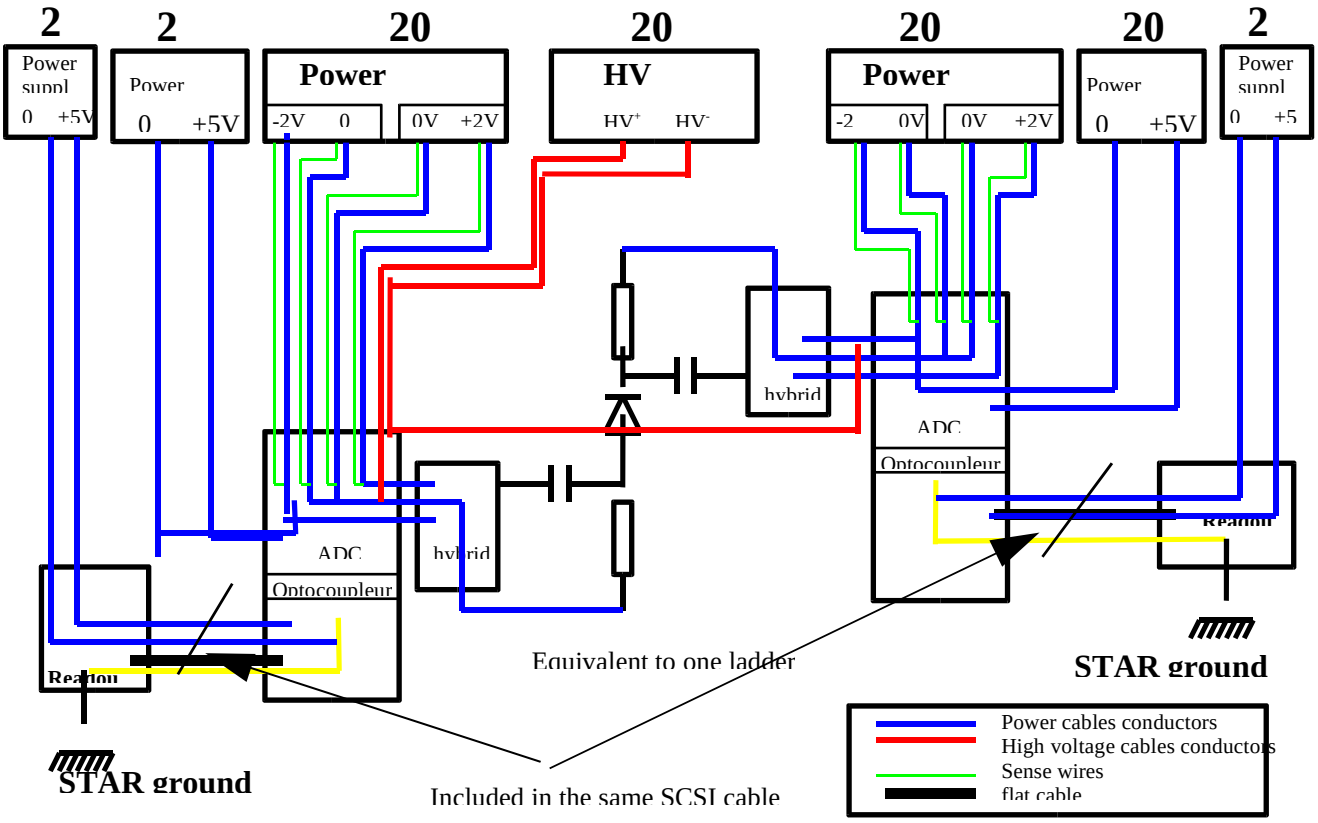
SSD cabling overview and documentation

The SSD cabling is foreseen as the following :



So for one cone the summary of cables is the following :

Power supply	**and High voltage cables**		
High voltage side	7 conductors	(+2V,0V),(0V,-2V),(0V,+5V), no used	10
Low voltage side	7 conductors	(+2V,0V),(0V,-2V),(0V,+5V),no used	10
Low voltage side	2 conductors	HV^+,HV^-	10
Sense wires			
High voltage side	5 conductors	+2V,0V,0V,-2V,+3V	10
Low voltage side	5 conductors	+2V,0V,0V,-2V,+3V	10

Those conductors can be grouped as following :

20 power and high voltage cables with 7 conductors (AWG 20)
20 sense cables with 5 conductors (AWG 24)
10 High voltage cable 2 conductors (AWG24)

Signal cable		
Signal	68 conductors	2

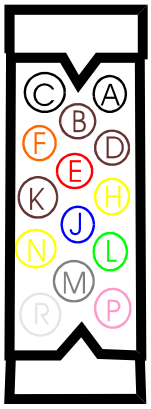
This cables includes non floating power supply (+5V,0V), control signal (JTAG+Address bus+Latchup info + Test + Hold) and data.

Connector Pin-out :

At the large end of the cone, one connector is used for one group of cable corresponding to one ladder. The pin-out of this connector is the following :

AMP M series 14 positions :

A : black	HT^+	J : bleu	+2V
B : brown	HT^-	K : brown	0V
C : black	Sense +2V	L : green	-2V
D : brown	Sense 0V	M : gray	0V
E : red	Sense -2V	N :yellow	NC
F : orange	Sense 0V	P : pink	+5V
H : yellow	NC	R : white	0V



rear view of the connector

Few comments about this pin-out :

HT cable :
- gauge 24
- connected to pins A and B
- no HT cable in group W1 to W10 and E11 to E20

Sense cable :
- gauge 24
- connected from pin C to pin F

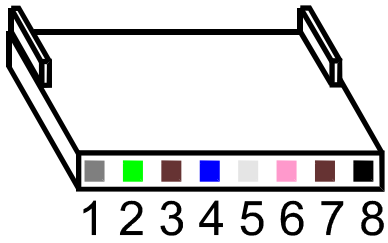
Power cable :
- gauge 18
- connected from pin J to pin R

Pin :
- pin H and pin N are connected to a conductor but are not used.
- pin P and pin R are female

At the small end of the cone, the power cable and the high voltage cable are connected to the same device, a Taitek connector, and the sense cable is connected to a FCI connector.

Taitek : power and HV connector

1 : grey 0V
2 : green -2V
3 : brown 0V
4 : blue +2V
5 : white 0V
6 : pink +5V
7 : brown HT^-
8 : black HT^+



FCI : sense connector

1 : black +2V
2 : brown 0V
3 : red -2V
4 : orange 0V
5 : yellow not attributed
6 : not connected