

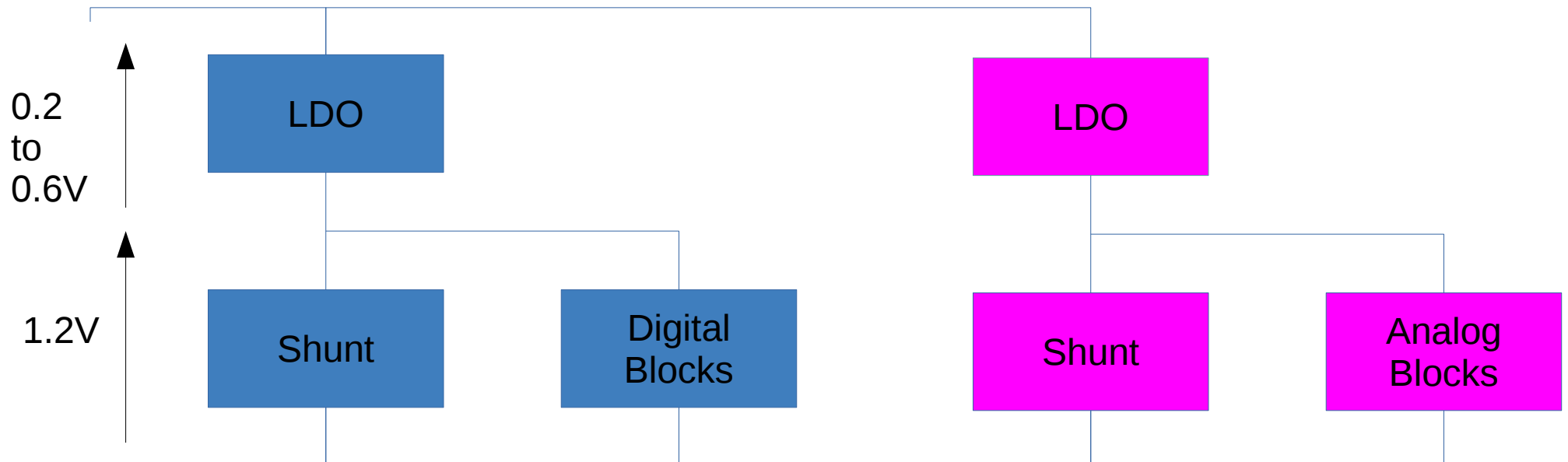
RD53A power supply

To reduce overall current and loss in LV cables, it has been decided to use **serial powering** of modules (SP chain).

SLDO : Shunt Lowd DropOut regulator : keep shunt voltage constant, whatever the current flowing.

Inside each module, 4 FE chips are in **parallel**.

Principle for 1 chip :



RD53A power supply

Internal voltage : 1.2 V

External supply 1.4 to 2.0 V

Three operation modes on SCC :

- ShuntLDO: Constant input current, Local regulated VDD
- LDO: External un-regulated voltage, Local regulated VDD
- Direct power: Shunt-LDO bypassed