HDI Preliminary Set of Requirements

No. Type of HDI:

Dimensions of HDI: W ? L => 42 mm (based on previous Babar experience)

(Size of the IC to be mounted 🡪 estimate max area, bonding pads on TWO opposite sides)

Space for mechanical mounting: Ex No of hole: two, 4 x 8 mm each

Space available to attack the fanout:

Space for Input cables: HV, LV (four lines with sensing), trigger/configuration, data out, DCS.

Grounding/shielding Who is addressing this?

Material construction: Thick Film Multilayer Al-N (keep the pyramid structure)

Number of Layers: Hybrid to be constructed on two sides

Total thickness: < 8 mm

Power: ONE VOLTAGE highly preferable, Current? Voltage?

Temperature sensors: yes, how many, what sensors?

Thermal Aspects: thermal simulation, thermal measurements, Hot spots?

Filtering to be mounted on HDI: requirements …..

Crosstalk/rms noise: ……

Other components on HDI: Buffer? Serializer/deserializer?