MICRON SEMICONDUCTORS

DESIGN W2 DSSSD 16x16
Type 2M → 300/500 µm → Type 2M
Type 7G → 65 µm → Type 2M
Type 9G → 45, 60 µm → 2M

Effective deadlayer + 3000 A

DESIGN W1 SSSD
Type 9M → 20µm → Type 2M

BB7(DS)-60 32x32
Type-2 deadlayer 0.5 µm
Metal: 3000+/-1000 A
Total = 900 nm (Martin-Oliver)

MSX25- 500/1500
Type 2M → 500/1500 → Type 2M

MSX40-1500
Type 2M → 300, 500 → Type 2M

"Deadlayer" = doping depth
Metalizing = Al contact **3000+/-1000 A**
→ WINDOW (micron definition)

WINDOW TYPE	DEAD LAYER	MINIMUM ENERGY THRESHOLD	
		Electron	Proton
2	0.5 µm	4 KeV	70 KeV
7	0.1 µm	1 KeV	10 KeV
9	0.05 µm	300 eV	4 KeV

Metal Coverage

The standard metallisation scheme is 100 % sputtered aluminium of thickness 0.5 µm for good ultra sonic wire bonding connections. The coverage of the metal over the active area can be suited to the sensors application and to compliment the dead layer of the implant.

METAL COVERAGE	DESCRIPTION
M	A continuous metal coverage of standard thickness over the whole active area regions.
G	Grid coverage, typically 3 %, of standard thickness metallisation over the whole active area and contact pads for wire bonding.