

Summary of PANDA01 Technology
 CiS Forschungsinstitut für Mikrosensorik und Photovoltaik GmbH
 L. Long
 12.20.2010

Starting material: FZ Si, 4", n/P, <111>, 2,3 ... 5,0 kOhmcm,
 Thickness 285 +- 10 µm
 Technology: double side processing, single metallization, front side p
 in n, back side n in n.
 N-Side isolation: P-spray
 Gurd rings: 8
 Biasing: punch through from bias ring to strips for both front and
 back side.

Layout features (unit in µm, front side: p-side, back side: n-side)

Detector chip	Spssdb65	Spssdm65	Spssdm50	Spssds65
Die Size	59997*35037	35037*35037	20951*20951	10017*10017
Number of strips	896*512	512*512	384*384	128*128
Pitch	65	65	50	65
Width	30	30	20	30
Stereo angle	90°	90°	90°	90°
Strip length	33299,58247	33287,33299	19202,19214	8339*8327
Active region size (within bias ring)	58275 *33315	33315*33315	19230*19230	8355*8355
Number of bias pads (p-side)	8+7	8+7	8+7	8+7
Number of dc pads (p-side)	498 top 498bottom	256 top 256 bottom	192 top 192 bottom	56 top 56 bottom
Number of ac pads (p-side) top	2*896	2*256	2*192	2*56
Number of ac pads (p-side) bottom	2*896	2*256	2*192	2*56
Number of bias pads (n-side)	8+15	8+7	8+7	8+7
Number of dc pads (n-side)	498 left 498 right	256 left 256 right	192 left 192 right	56 left 56 right
Number of ac pads (n-side) left	2*498	2*256	2*192	2*56
Number of ac pads (n-side) right	2*498	2*256	2*192	2*56
Dc pad passivation opening	39*95	39*95	39*95	39*95
Ac pad passivation opening	51*196	51*196	48*196	51*196
Bias pad passivation opening	100*100	100*100	100*100	100*100
Bias pad center to chip rim	801	801	801	801
dc pad center to	1361	1361	1361	1361

chip rim				
ac pad1 center to chip rim (odd strip)	2861	2861	2861	2061
ac pad2 center to chip rim (even strip)	3661	3661	3661	2661
ac pad3 center to chip rim (odd strip)	6861	6861	6861	3261
ac pad4 center to chip rim (even strip)	7661	7661	7661	3861

Group: FRAMES
Level: 0
layer: 001
X: 7926.83 DX:
Y: 50331.35 DY:

0102 210 10A0000

