# **AIDAinnova**

Confidential

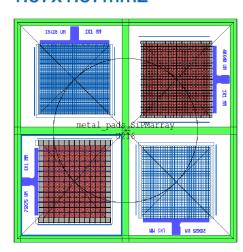
Report Maria Ruzzarin (FBK) 3/6/2024

**NUV-HD for AIDAInnova Wafer composition** 2x2arrays: 1x1 SiPM and Mini-3.15x3.15 3.15x3.15 3.15x3.15 SPADs + Mini-SiPM +1x1 **SiPM** single silicon block for irradiation

#### Variants of 2x2 arrays:

- 1) 2x2 array of SiPM 1x1mm2 with 15um-25um-40um-75um cell size
- 2) 2x2 array of SiPM 0.75x0.75mm2 with 15um-25um-40um-75um cell size
- 3) 2x2 array of SiPM 0.5x0.5mm2 with 15um-25um-40um-75um cell size
- 4) 2x2 array of SiPM 0.25x0.25mm2 with 15um-25um-40um-75um cell size
- 5) 2x1 array of SiPM 1.5x1.5mm2 with 15um+25um cell size
- 6) 2x1 array of SiPM 1.5x1.5mm2 with 40um+75um cell size
- 7) single SiPM 2x2mm2 with 15um cell size
- 8) single SiPM 2x2mm2 with 40um cell size

Chip size 3.15x3.15mm2. The 2x2 array variants can be sub-singulated in 4 individual pieces of 1.57x1.57mm2





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# **NUV-HD for AIDAInnova Estimation of total number of structures**

For the main process split (Low electrical field): #160 structures for each variant of 2x2 array (slides 6-7-8) #300 3x3 mm<sup>2</sup>

### **Gantt**

AIDA innova	May	/ 24	June	24	July 24	Aug 24	Sept 24	Oct 24	Nov 24	Dic 24	Gen 25	Feb 25	Mar 25	Apr 25
SiPM wafer														
process														
IV at wafer														
level														
irradiation														
campaign														

# **DMnet**

Last annual meeting (the project will end in March 2025):

IBS Science and Culture Center, Daejeon, Korea from September 5th to 7th, 2024

https://indico.ibs.re.kr/event/664/

# **Shifts**

Name <b>* ▼</b>	Score/Due 🕯 🔻	Fraction • •			
Hawaii	80.50 / 71.13	113%			
KEK	0.00 / 8.89	<mark>0%</mark>			
Ljubljana(Uni-LJ)	10.00 / 44.45	22%	TOD		
Nagoya	102.50 / 62.24	164%	TOP a+b		
Padova	23.50 / 58.27	40%	40%		
Torino	31.50 / 35.56	88%			
Cincinnati	107.50 / 84.95	126%			
IIT-Hyderabad	75.50 / 71.13	106%			
Pittsburgh	16.00 / 49.38	32%			
Nagoya	73.69 / 20.64	357%	DP + Capitan + Navigator		
Napoli	38.81 / 22.78	170%	67%		
Niigata	25.14 / 14.98	167%			
Padova	7.23 / 10.67	67%			