

WP11: microelectronics



WP11: participants and budget



WP11: Microelectronics

Work Package number	11	Lead beneficiaries			CNRS, INFN		
Work Package title	Microelectronics						
Participant number	8	10	12	16	17	22	28
Short name of participant	CNRS	WEEROC	DESY	UHEI	UBONN	INFN	AGH
Person months per participant:	63	8 (16)	7 (14.5)	7.5 (18.5)	8 (16)	44 (77)	35
Start month - End month	M1 – M48						

- Design sites at INFN: BA, BO, CA, MI, PI, PV, TO
- WP budget 810 k



WP11 tasks



- 📌 Exploring the 28 nm CMOS technology:
 - 📌 radiation qualification
 - 📌 building blocks developments
 - 📌 Front-End ASIC for pixel detectors

- 📌 ASICs for others WP: 130 nm/65 nm
 - 📌 Cryogenic CMOS
 - 📌 ASICs for timing, gas detectors and calorimetry applications



WP11 deliverables



Deliverables related to WP11	
D11.1: MPW 28 nm <i>The deliverable is a multi-project wafer fabrication with the different test ASICs in CMOS 28 nm (task 11.2)</i>	22
D11.2: MPW 65/130 nm <i>The deliverable is a multi-project wafer fabrication with ASICs in CMOS 65 and/or 130 nm that can be used to read out detectors from the other WPs and in particular WP8 (task 11.3)</i>	23
D11.3: Measurement reports <i>Each of the ASIC fabricated in the two previous deliverables will have its design and performance documented in a report (task 11.2, task 11.3)</i>	42

 Basically: 2 years of design + 2 years for characterization/user experience



WP11 considerations/first steps



- Budget: < 1 CSN5 call for the full collaboration
- INFN budget: CSN5 standard R&D
- Synergy with other running projects
- Preliminary INFN design and user meeting

