



Some ideas for New 3D Layout

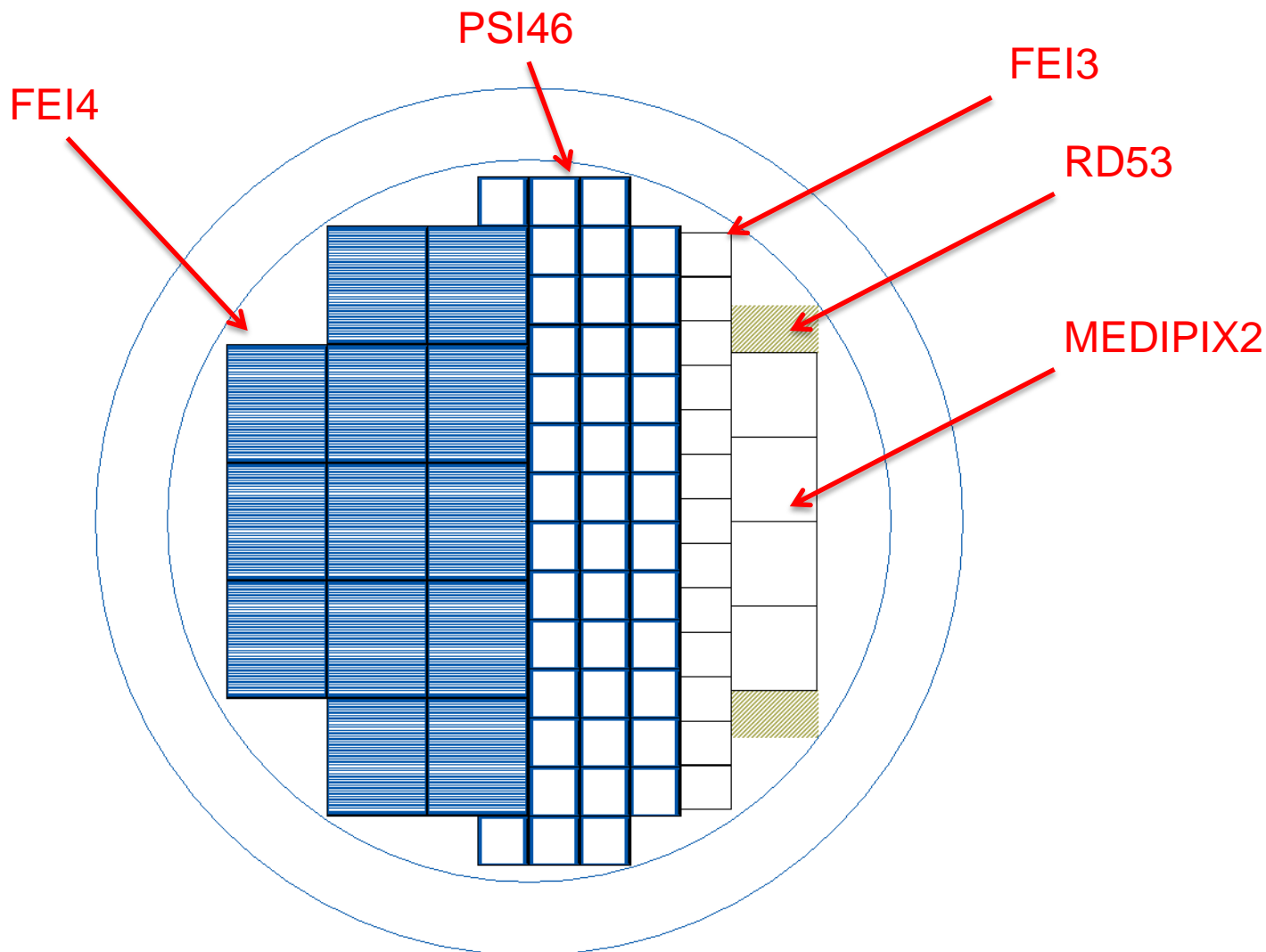
Gian-Franco Dalla Betta

University of Trento and TIFPA INFN, Trento, Italy

- Floorplan summary
- Bump pad layout details for new chips
 - RD53
 - FERMILAB



WAFER FLOORPLAN



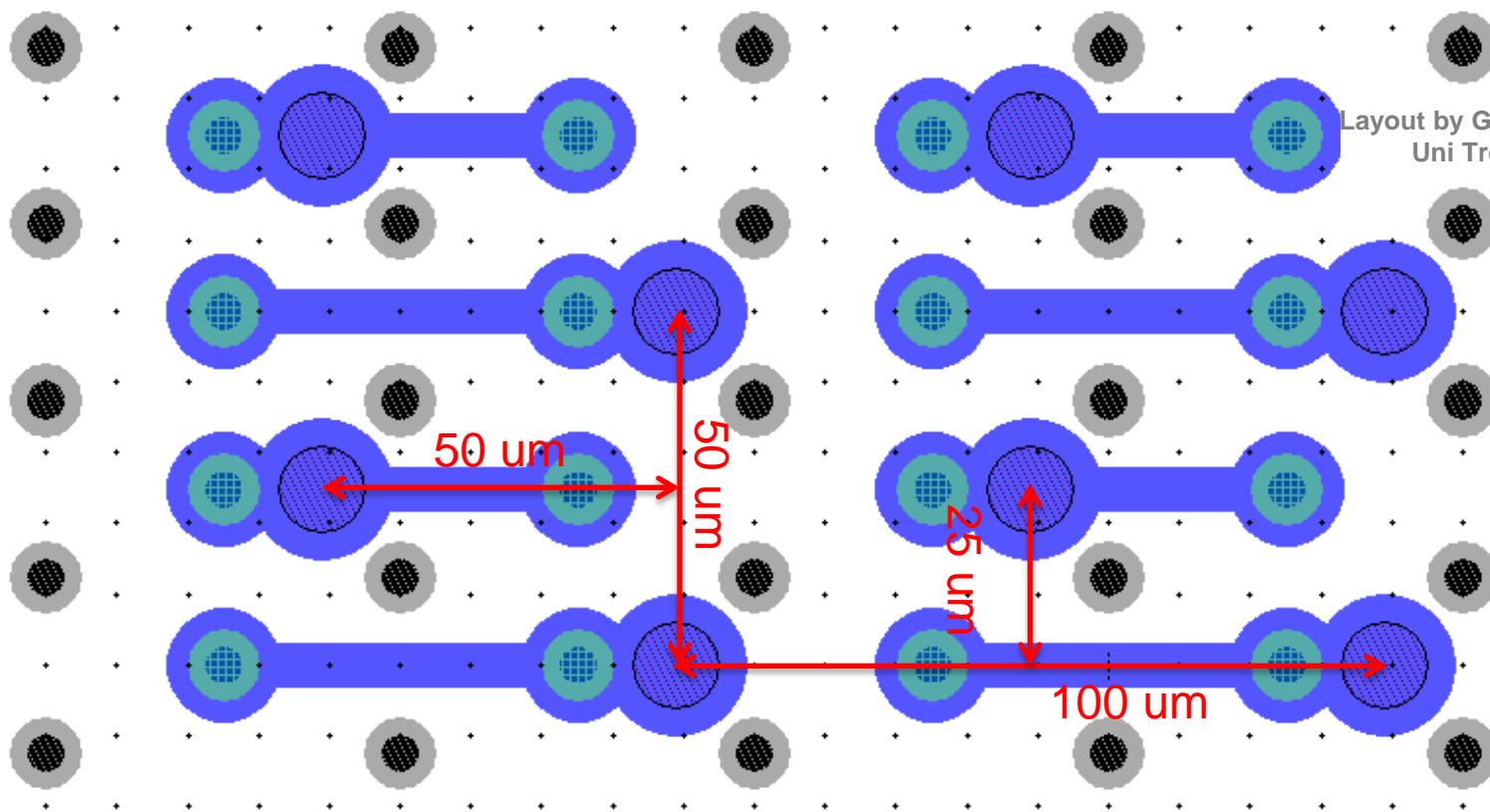


Summary Table

FEI4	Pixel	Rest	GR-3D	Multiplicity	PSI146	Pixel	Rest	GR-3D	Multiplicity
	50x50	Grid		2		50x50	Grid		6
	50x50	Grid	Yes	2		50x50	Grid	Yes	6
	50x50	50x450L		1		50x100	Grid		6
	25x100	Grid		1		50x100	Grid	Yes	6
	25x100	Grid	Yes	1		25x100	Grid		5
	25x100_1E	Grid		1		25x100	Grid	Yes	5
	25x100_1E	Grid	Yes	1	CMS-2E	100x150	n.a.		2
	25x500_1E	n.a.		2		100x150	n.a.	Yes	2
IBL	50x250	n.a.		1	CMS-3E	100x150	n.a.		2
IBL	50x250	n.a.	Yes	1		100x150	n.a.	Yes	2
Total FEI4				13	Total CMS				42
FEI3	Pixel	Rest	GR-3D	Multiplicity	MEDIPIX	Pixel	Rest	GR-3D	Multiplicity
	50x50	Grid		4		55x55	n.a.		4
	50x50	Grid	Yes	3	Total				4
	25x100	Grid		3					
	25x100	Grid	Yes	3	RD53	Pixel	Rest	GR-3D	Multiplicity
						50x50	n.a.		10
						125x100	n.a.		10
Total FEI3				13	Total				20

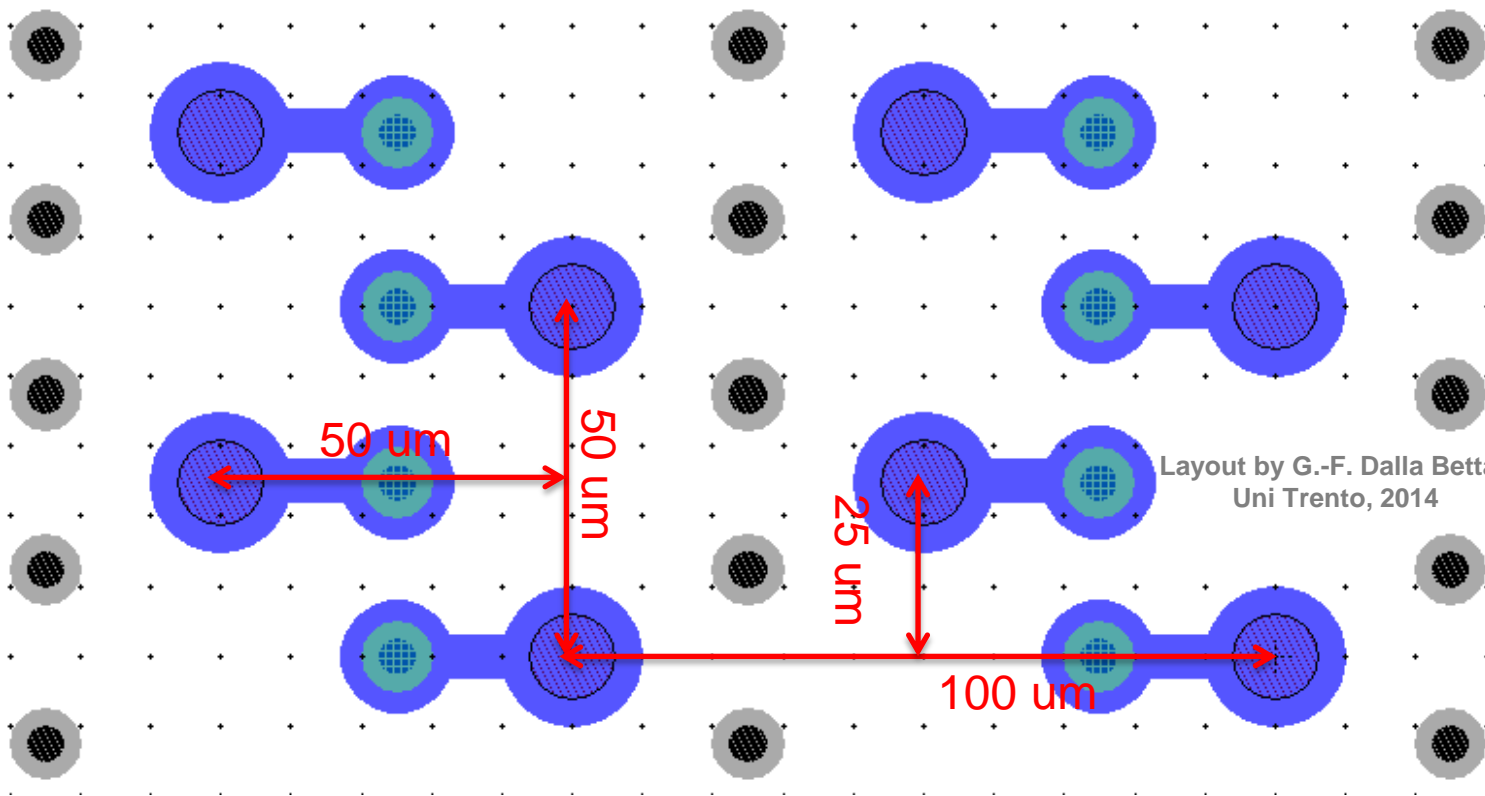


BUMP PADS RD53 (1): 25 x 100 (2E)



Layout by G.-F. Dalla Betta,
Uni Trento, 2014

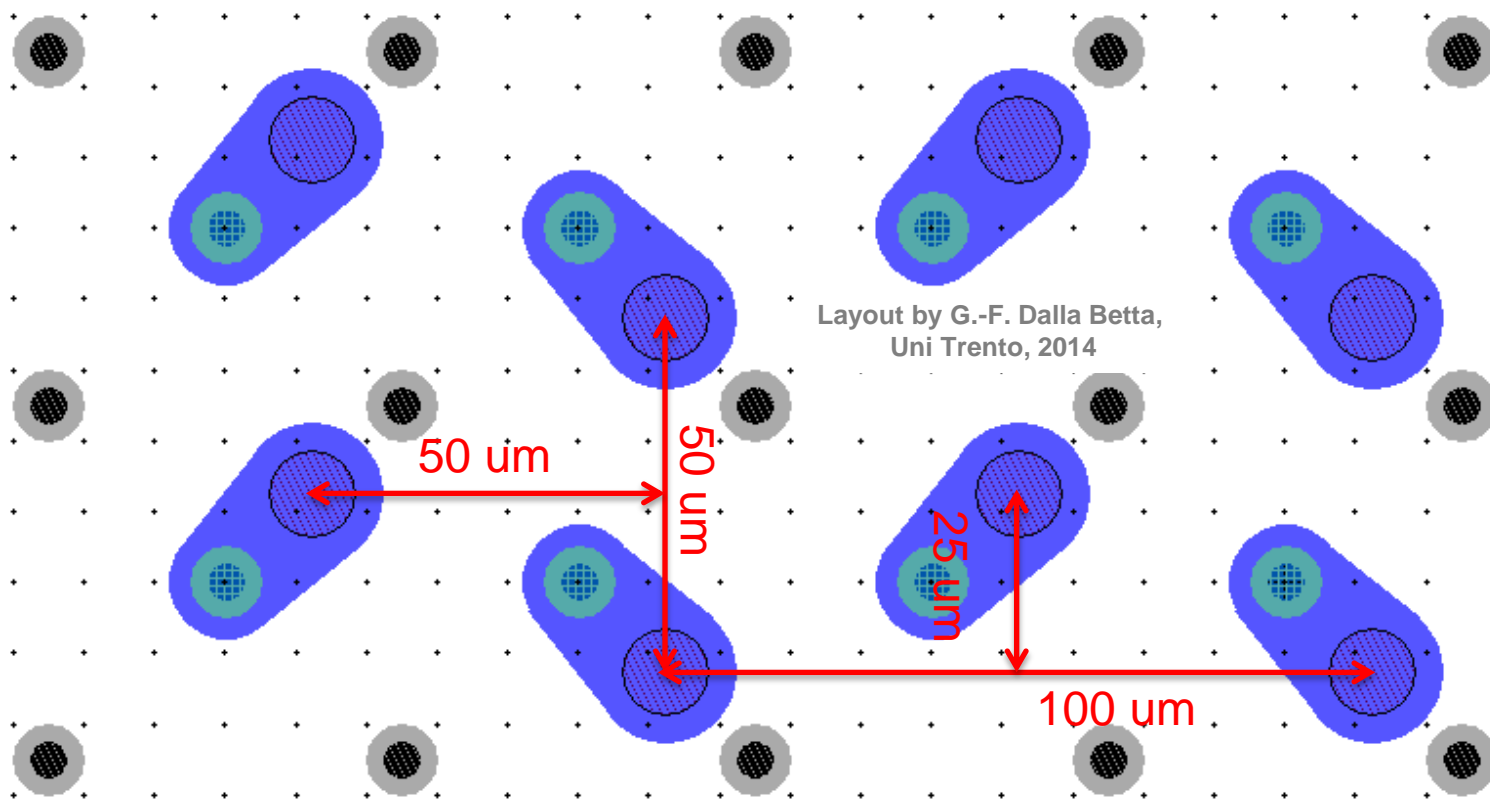
BUMP PADS RD53 (2): 25 x 100 (1E)



Layout by G.-F. Dalla Betta,
Uni Trento, 2014

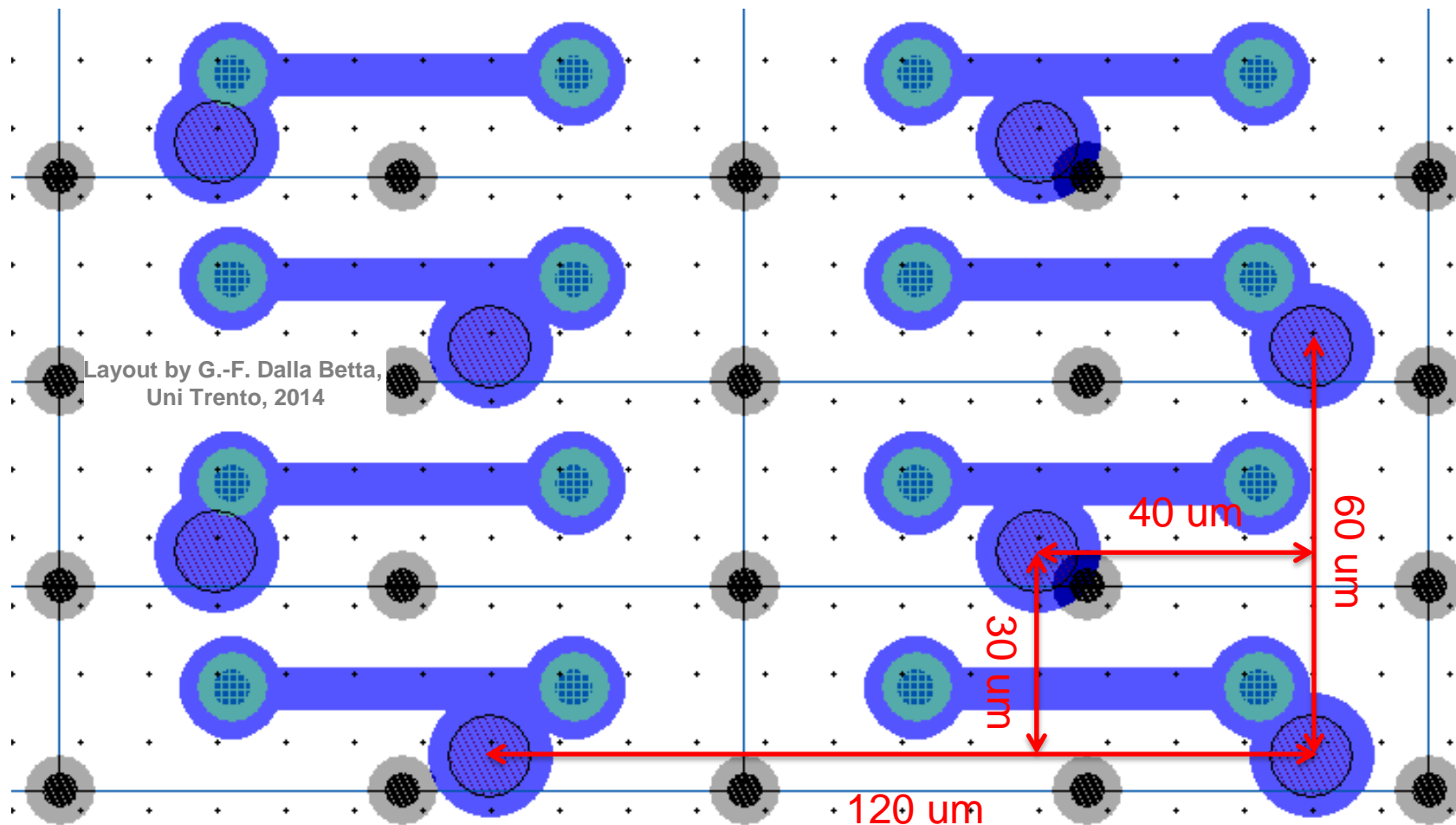


BUMP PADS RD53 (3): 50 x 50 (1E)



FERMILAB CHIP (1): 100 x 30 (2E)

Not compatible !





FERMILAB CHIP (2): 100 x 30 (1E)

