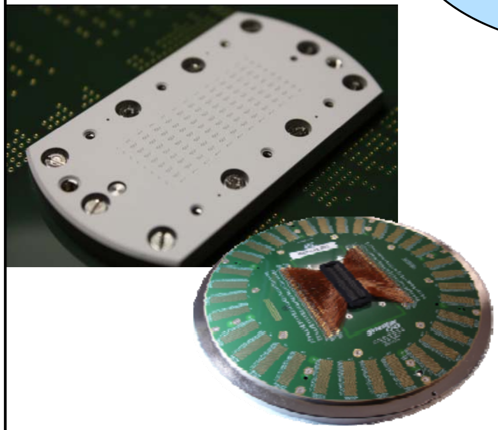
In partnership with ST Microlectronics Rousset (EWS Probe card Group)

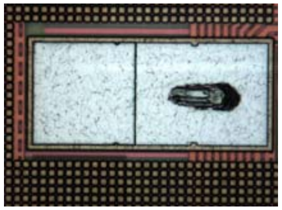
Synergie Cad Probe developed a concept to improve probe mark quality and reduce cost of wafer level test

High parallellism
High pin count

For all technologies
Vertical
Cantilever
Mems

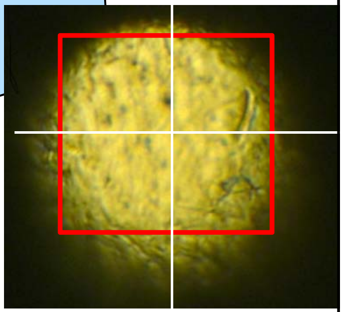


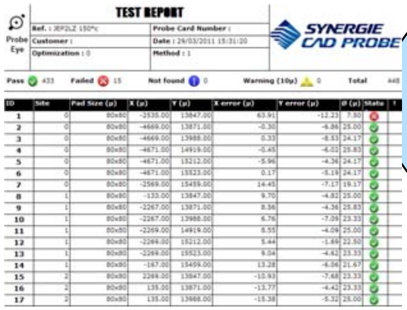
Very fine pitch/pad size on new product



ST Microelectronics
Our Need is certification of X/Y alignment in production

DIAMETER





TEST REPORT

Probe Eye

Ref. : JEP2LZ 150°c	Probe Card Number :
Customer :	Date : 29/03/2011 15:31:20
Optimization : 0	Method : 1

SYNERGIE CAD PROBE

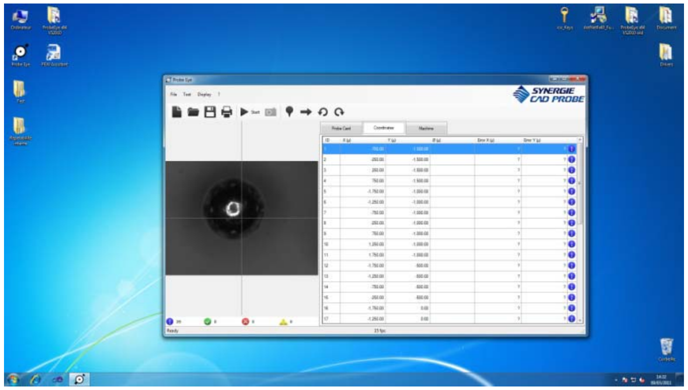
Pass ✓ 433 Failed ✗ 15 Not found ⓘ 0 Warning (10µ) ⚠ 0 Total 448

ID	Site	Pad Size (µ)	X (µ)	Y (µ)	X error (µ)	Y error (µ)	Ø (µ)	State	!
1	0	80x80	-2535.00	13847.00	63.91	-12.23	7.50	✗	
2	0	80x80	-4669.00	13871.00	-0.30	-6.86	25.00	✓	
3	0	80x80	-4669.00	13988.00	0.33	-8.53	24.17	✓	
4	0	80x80	-4671.00	14919.00	-0.45	-6.02	25.83	✓	
5	0	80x80	-4671.00	15212.00	-5.96	-4.36	24.17	✓	
6	0	80x80	-4671.00	15523.00	0.17	-5.19	24.17	✓	
7	0	80x80	-2569.00	15459.00	14.45	-7.17	19.17	✓	
8	1	80x80	-133.00	13847.00	9.70	-4.82	25.00	✓	
9	1	80x80	-2267.00	13871.00	8.56	-4.36	25.83	✓	
10	1	80x80	-2267.00	13988.00	6.76	-7.09	23.33	✓	
11	1	80x80	-2269.00	14919.00	8.55	-4.09	25.00	✓	
12	1	80x80	-2269.00	15212.00	5.44	-1.69	22.50	✓	
13	1	80x80	-2269.00	15523.00	9.04	-4.62	23.33	✓	
14	1	80x80	-167.00	15459.00	13.28	-6.06	21.67	✓	
15	2	80x80	2269.00	13847.00	-10.93	-7.68	23.33	✓	
16	2	80x80	135.00	13871.00	-13.77	-4.42	23.33	✓	
17	2	80x80	135.00	13988.00	-15.38	-5.32	25.00	✓	

Data collection

Quick test time

SAMX.9®

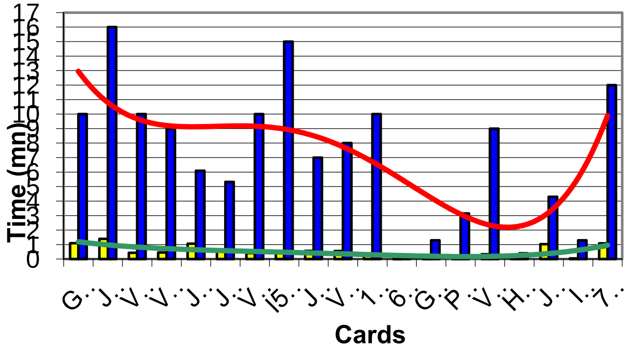


Accepted Solution

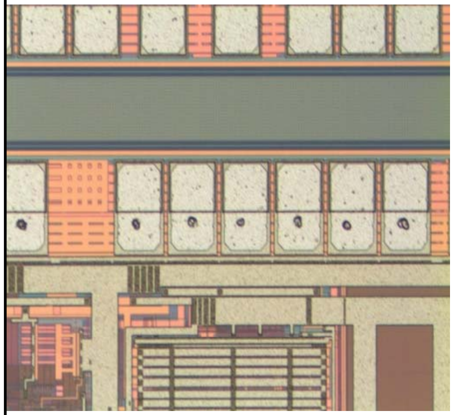
- Test of Probe Alignment (X/Y)
- Test of Probe Diameter
- Precise and Repetitive Measurements
- Speed of Setup (≈ 1 minute)
- Short Test Time (1000 probes ≈ 3 minutes)
- Easy to Handle
- Operator Friendly (Touch-Screen with Windows 7®)
- Test of all Probe Card Technologies
- Tested and Approved by Major Semiconductor Fabs
- Competitive cost, One Year Return on Investment

CAPITAL GAIN IN PRODUCTION

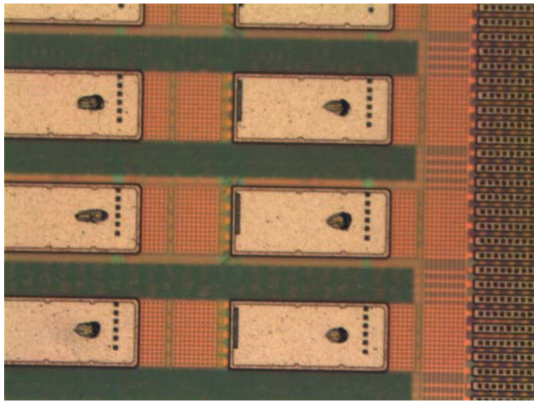
- Cell test Up time improvement
  - ➢ Setup optimization/start efficiency
  - ➢ Setup time reduction



- Low MMTR probe card
  - ➢ Diagnostic less than 5’



- Quality improvement
  - ➢ Check all probe cards before use :
  - ➢ Probe mark position and integrity



Your Contacts

Didier Baumann: didier.baumann@st.com

Robert Diperi: robert.diperi@st.com

info@synergie-cad-probe.fr

sales@jpkummer.fr