



Integrated Technologies Division
Chandler, AZ
Site Capability Matrix

Matrix Key:

N/A - No application exists, or capability currently not available.

X of Y - Number of machines with indicated capability.

Year - Year process was qualified, or first application was implemented.

Month/Year - Anticipated implementation date.

TBD - No date established for implementation, but implementation planned.

Surface Mount

	Chandler, AZ	Notes
Chemistry		
Water Soluble	Qualitek 788	
No-Clean	N/A	
RMA	N/A	
Stencil Printing		
Automatic Inline Machines	2 of 2	
Vision Alignment	All	
.4mm pitch capable		
Equipment Capable	All	
Qualified Process	Yes	
< .4mm pitch		
Equipment Capable	All	
Qualified Process	TBD	
Epoxy printing		
Equipment Capable	All	
Qualified Process	Yes	
Stencil Cleaning		
Ultrasonic	TBD	
Hand Cleaning	Yes	
Placement		
14 X 18" board size	2 of 2	
16 X 18" board size	2 of 2	
18 X 20" board size	1 of 2	
Matrix tray sequencers	1 of 2	
0402's		
Equipment Capable	2 of 2	
Qualified Process	June-02	

0201's		
Equipment Capable	1 of 2	
Qualified Process	September-02	
.5mm pitch		
Equipment Capable	2 of 2	
Qualified Process	2001	
.4mm pitch		
Equipment Capable	1 of 2	
Qualified Process	TBD	
.3mm pitch		
Equipment Capable	1 of 2	
Qualified Process	TBD	
1.27mm pitch BGA		
Equipment Capable	2 of 2	
Qualified Process	2001	
1.0mm pitch BGA		
Equipment Capable	2 of 2	
Qualified Process	2001	
.8mm pitch mBGA		
Equipment Capable	1 of 2	
Qualified Process	July-02	
.75mm pitch mBGA		
Equipment Capable	1 of 2	
Qualified Process	July-02	
.5mm pitch mBGA		
Equipment Capable	1 of 2	
Qualified Process	September-02	
Odd form		
Equipment Capable	1 of 2	
Qualified Process	TBD	No application.
Reflow		
Profiling	Datapaq	
Full Convection	2 of 2	
Epoxy cure	2 of 2	

Double sided QFP		
Equipment Capable	1 of 2	
Qualified Process	2001	
Double sided BGA		
Equipment Capable	1 of 2	
Qualified Process	2002	No application.
Pin in Paste		
Equipment Capable	1 of 2	
Qualified Process	TBD	No application.
Inspection		
Automated Optical Inspection	N/A	
X-ray	Yes	
Rework/Repair		
Fine Pitch		
Equipment Capable	1	
Qualified Process	Yes	
1.27mm pitch BGA		
Equipment Capable	TBD	
Qualified Process	TBD	
1.0mm pitch BGA		
Equipment Capable	TBD	
Qualified Process	TBD	
.8mm - .5mm pitch mBGA		
Equipment Capable	TBD	
Qualified Process	TBD	
Dispensing		
Epoxy	N/A	
Masking	Hand	
Underfill	N/A	

Wave/Wash

	Chandler, AZ	Notes
Chemistry		
Water Soluble	Kester	
No-Clean	N/A	
RMA	N/A	
Wave Solder		
Profiling	Datapaq	
Dual Wave	1 of 1	
16" width capability	1 of 1	
20" width capability	1 of 1	
Rework/Repair		
Selective soldering pot	Yes	
Conformal Coat		
Spray	N/A	
Dip	N/A	
Wash		
Dionized Water	1 of 1	
Saponified Wash	N/A	
Closed Loop	Yes	
Ionic Contamination Testing		
	Yes	

Through - Hole

	Chandler, AZ	Notes
<i>Preforming</i>		
Axial	Yes	
Radial	N/A	
<i>Axial Sequencing</i>		
<i>Axial Insertion</i>		
Single head VCD	N/A	
Dual Head VCD	N/A	
<i>DIP Insertion</i>		
0.3	N/A	
0.6	N/A	
sockets	N/A	
<i>Radial Insertion</i>		
<i>Press Fit</i>		
Manual Presses	5	
Pneumatic Presses	2	
Back-up Fixtures Created	In house	
2mm Connectors	1997	

Test

Chandler, AZ

Notes

Level II In house

Level III Out Sourced

ICT Teradyne Z1860 VP

Functional As Required - In house

Environmental Stress Screening

Burn in	N/A
Temp/Humidity	N/A
Vibration/Shock	N/A