## Glossary

Term	Definition	
0603R02 (1608R05)	Chip component surface mount package. The dimensions are 0.060" by 0.030" (1.6mm by 0.8mm). R denotes Chip Resistor. 02 (05) denotes 0.020" (0.5mm) component height	
AMV	Archimedes Metering Valve – Adhesive Dispense Head	
BGA	Ball Grid Array	
BQFP	Bumpered Quad Flat Package	
Butt joint	Insertion Mount component soldered to the pc board acting as a Surface Mount component	
C4	Controlled Collapse Chip Connection	
CAD	Computer Aided Design	
Chip component	Resistor or Capacitor with metal terminations instead of leads.	
CQFP	Ceramic Quad Flat Pack	
CSBGA	Chip Scale BGA	
CSP	Chip Scale Package	
DMRE	A "miracle" worker in the UIC Training Department	
ESD	Electrostatic Discharge	
FC	Flip Chip	
GSM	General Surface Mount	
Gull Wing	Leads spread out sideways from the component package resembling sea gull wings	
HS (feeder)	High Speed	
HSP	High Speed Placement	
IM	Insertion Mount	
IMC	IM Component	
J lead	Leads bend underneath the component package resembling the letter 'J'	
JEDEC	Joint Electronic Device Engineering Council	
Leadless	Solder balls on the bottom of the component package (BGA) or	
MCMBGA	Multichip module BGA	
MELF	Metal Electrode Face Bonded	
Micro Dispenser II	A type of fluxer that uses a centrifugal pump	
MP (feeder)	Multi-Pitch	
MQFP	Metric QFP	
NCC8	Non Contact Centering Head – 4 spindle head with an early version of on the head camera	
OFA	Odd-Form Assembly	
OFS	Odd-Form System	
Pattern	A vision algorithm that locates features other than leads (rectangles, disks, corners, cross shapes, etc.)	
P2P	Part to Pad (Upward Looking Camera acronym)	
PDP	Positive Displacement Pump – Adhesive Dispense Head	
PEC	Pattern Error Correction	
PLCC	Plastic Leaded Chip Carrier	
PQFP	Plastic QFP	
PTF	Platform Tray Feeder	
PWC	Programmable Width Control	
QFP	Quad Flat Pack	
Serial Flux Head	An older style fluxer that uses a centrifugal pump	

SM	Surface Mount	
SMC	SM Component	
SMD	SM Device	
SMEMA	Surface Mount Equipment Manufacturer Association – used to	
	designate the board handling protocol for UIC machines	
SMT	SM Technology	
SMTF	Stackable Matrix Tray Feeder	
SOIC	Small Outline Integrated Circuit	
SOJ	Small Outline 'J' leads	
SOP	Small Outline Package	
Special Leaded	A vision algorithm that locates leads of various widths by	
	defining several groups of leads on a single side. These groups are called overlays.	
SSOP	Shrink SOP	
SOT	Small Outline Transistor	
TAB	Tape Automated Bonding	
Tape pakò	Trademark – National Semiconductor – Molded Carrier Ring	
TCP	Tape Carrier Pack (component placed in TAB process)	
Through-hole	Another name for IM	
TFA (Rotary)	Older Thin Film Applicator	
TFA (Linear)	Newer Thin Film Applicator designed specifically to assist in the	
	assembly of flip chips	
TQFP	Thin QFP	
TSOP	Thin SOP	
TSSOP	Thin, Shrink SOP	
UFP 300+	Ultra Fine Pitch Placement Head (for fine pitch components with	
	more than 300 leads)	
UIC	Universal Instruments Corporation	
UPS (software)	Universal Platform Software (OS/2 Operating System)	
UPS+ (software)	Universal Platform Software (Windows 2000 Operating System)	
UPS (electrical)	Uninterruptible Power Supply	
USOS	Universal Supervisory Operating System	
VME	Computer bus used in Universal's Platform and IM machines	
WF	Wafer Feeder	
CPU	Central processing unit	

CPU	Central processing unit
TAM	Technology Acceptance Model
PCBA	Printed Circuit Board Assembly
NPI	New Product Introduction
DFM	Design For Manufacture
MVT	Mass Verification Test
MTF	Modulation Transfer Function
ID	Industrial Design
F/T	Function Test

ERS	External Referance Spec
QRA	Quality & Reliability Assurance
DMR	Defective Material Report
RMA	Return Marerial Administration
T/C	Temperature Cycle
SPC	Statistic process Control
ISO	International Standard Organization
VMI	Visual Mechanical Ispection
FQC	Final Quality Control
EAR	Engineering Analysis Request
COGS	Cost of Goods Sold
AR	Account Payable
MIS	Management Information System
OBA	Open Box Audit
CAR	Corrective Action Request
4M	Man, Machine, Material, Method
MPS	Mass Production Schedule
WIP	Working In Process Inventrory
MI	Manual Insertion
SMD	Surface Mount Device
В/І	Burn In
ESD	Electrical Static Discharge
TAB	Tape Aotomated Bonding
ТСР	Tape Carrier Package
TTL	Transister-Transister-Logic