ELECTROVERT | REFLOW & WAVE SOLDERING

PROBLEMS & SOLUTIONS

		WAVE SOLDERING																									REFLOW SOLDERING								
		INSUFFICIENT SOLDER FLOW-THRU	INSUFFICIENT SOLDER (SOLDER SIDE)	DE-WETTING OR NON-WETTING	SOLDER VOIDS OR OUTGASSING	SKIPPED OR OMITTED SOLDER	EXCESSIVE SOLDER (COMP SIDE)	EXCESSIVE SOLDER (SOLDER SIDE)	EXCESSIVE SOLDER (BOTH SIDES)	ICICLES	BRIDGING	WEBBING	SOLDER BALLS & SPLATTER	ROUGH OR DISTURBED SOLDER	GRAINY SOLDER	COLD SOLDER JOINT	DISCLOSED SOLDER JOINT	FLUX ENTRAPMENT	MASKING FAILURE	BLISTERING	MEASLING	COMPONENTS LIFTED	WARPAGE	FLOODING	EXCESSIVE DROSS GENERATED	EXCESSIVE FLUX USED	EXCESSIVE SOLDER DRAGOUT		BRIDGING	SOLDER BALLS	GRAINY SOLDER	INCOMPLETE FILLET	OPEN JOINT	LAMINATE DISCOLORATION	LEACHING	HALO EFFECT	TOMBSTONING	DISCOLORED JOINT
		PROBLEMS																																	
REFLOW CYCLE TOO LONG	PROCESS																																●	●			
EXCESSIVE REFLOW TEMP	PROCESS																																●	●			
EXCESSIVE HEATING RATE	PROCESS																												●		●					●	
DEFECTIVE FIXTURE	PROCESS	●	●		●	●	●			●	●	●	●					●				●	●	●			●										
BOARD RERUN	PROCESS	●		●	●	●	●	●	●	●	●	●							●	●	●		●	●													
BOARD NOT SEATED RIGHT	PROCESS	●	●	●	●	●	●	●	●	●				●								●	●	●													
EARLY REMOVAL OF BOARD	PROCESS									●				●	●	●						●															
CONVEYOR ANGLE LOW	PROCESS							●	●	●	●																										
CONVEYOR ANGLE HIGH	PROCESS	●	●		●																	●															
CONVEYOR VIBRATION	PROCESS									●				●	●	●						●															
CONVEYOR SPEED LOW	PROCESS			●	●		●	●	●		●	●				●	●		●	●	●		●	●													
CONVEYOR SPEED HIGH	PROCESS	●	●	●	●	●		●		●	●	●	●	●	●	●	●	●						●			●										
PALLET TOO HOT	PROCESS	●	●	●	●	●		●		●	●	●															●										
NO FLUX BLOW-OFF	PROCESS	●		●	●			●	●				●					●							●	●											
FLUX BLOW-OFF EXCESSIVE	PROCESS	●	●	●		●				●	●	●										●					●										
FLUXER UNEVEN	PROCESS	●	●	●	●	●		●	●	●	●	●														●	●										
FLUX FOAMHEAD LOW	PROCESS	●	●	●	●	●				●	●	●															●										
FLUX NOT MAKING CONTACT	PROCESS	●	●	●	●	●				●	●	●															●										
FLUX NO LONGER ACTIVE	PROCESS	●	●	●	●	●		●		●	●	●																									
FLUX SPECIFIC GRAVITY HIGH	PROCESS	●	●	●	●	●		●										●							●	●											
FLUX SPECIFIC GRAVITY LOW	PROCESS	●	●	●	●			●		●	●	●	●																								
FLUX CONTAMINATED	PROCESS	●	●	●	●	●				●	●	●	●				●	●								●											
PREHEAT TEMP LOW	PROCESS	●	●	●	●					●	●		●		●	●	●	●					●	●	●				●								
PREHEAT TEMP HIGH	PROCESS	●	●			●				●	●	●					●		●	●	●		●	●													
EXCESSIVE SOLDER DROSS	PROCESS											●		●	●																						
SOLDER CONTAMINATED	PROCESS	●	●	●				●	●	●	●	●		●	●	●	●								●		●										
SOLDER WAVE UNEVEN	PROCESS	●	●		●	●	●	●	●	●	●		●	●								●		●													
SOLDER WAVE HEIGHT LOW	PROCESS	●	●	●	●	●				●	●			●																							
SOLDER WAVE HEIGHT HIGH	PROCESS						●		●		●		●									●		●	●		●										
SOLDER TEMP LOW	PROCESS	●		●	●		●	●		●	●	●		●	●	●								●			●										
SOLDER TEMP HIGH	PROCESS	●	●		●		●		●				●			●	●		●	●	●		●	●	●												
SOLDER PASTE OXIDATION	ASSEMBLY																																		●		●
SCREEN/STENCIL CLOGGED	ASSEMBLY																															●					
INSUFFICIENT SOLDER PASTE	ASSEMBLY																														●						
OXIDIZED SOLDER PASTE	ASSEMBLY																													●							
SOLDER PASTE VISCOCITY TOO LOW	ASSEMBLY																													●							
MISALIGNED COMPONENT	ASSEMBLY																											●				●					
EXCESS SOLDER DEPOSITION	ASSEMBLY																											●									
IMPROPER BOARD HANDLING	ASSEMBLY	●	●	●	●	●				●	●	●										●			●												
COMPONENT LEADS TOO SHORT	ASSEMBLY		●																																		
COMPONENT LEADS TOO LONG	ASSEMBLY									●	●	●										●					●										
COMPONENT CONTAMINATION	ASSEMBLY	●	●	●	●	●				●	●	●				●	●								●			●		●							●
BOARD CONTAMINATION	ASSEMBLY	●	●	●	●	●				●	●	●	●		●	●	●		●						●			●		●							●
COMPONENT CONTAMINATION	FABRICATION																											●		●							
ROUGH PLATED THROUGH HOLE	FABRICATION	●			●								●					●																			
BOARD WARPED	FABRICATION	●	●		●	●	●																●	●													
HOLE/PAD MISREGISTRATION	FABRICATION	●	●		●	●																															
MOISTURE IN LAMINATE	FABRICATION	●			●								●																								
DEFECTIVE MASK MATERIAL	FABRICATION				●	●					●	●	●						●	●	●						●										
MISREGISTRATION OF MASK	FABRICATION	●	●		●	●																															
MASKING IN HOLES	FABRICATION	●	●		●	●																															
BOARD CONTAMINATION	FABRICATION	●	●	●	●	●				●	●	●	●		●	●	●		●	●	●				●			●		●							
BOARD OXIDIZED	FABRICATION	●	●	●	●	●				●	●	●													●												
PAD SIZE MISMATCH	DESIGN																																			●	
WEIGHT DISTRIBUTION	DESIGN	●	●			●	●	●															●	●													
SIZE OF BOARD	DESIGN					●																	●	●													
COMPONENT ORIENTATION	DESIGN				●	●					●	●																									
HOLE-TO-LEAD RATIO-LARGE	DESIGN	●	●		●	●	●																														
HOLE-TO-LEAD RATIO-SMALL	DESIGN	●			●													●																			
INTERNAL PLANE	DESIGN	●	●		●														●	●	●		●														
LARGE PLANE ON SOLDER SIDE	DESIGN	●	●					●		●	●								●	●	●																
LARGE PLANE ON COMPONENT SIDE	DESIGN	●	●				●																														
PALLET DESIGN	DESIGN	●	●			●	●	●		●	●	●	●	●				●				●	●	●		●	●										

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