

[illegible]

HIPRO-DG. ELECTRONICS CO.,LTD
PROCESS MANAGENENT PLAN

CUSTOMER: IBM
MODEL NAME :IBM1554F3,IBM1554F3P,IBM1554F3T

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DOC NO:			REV	EFFECTIVE DATE	CHANGE ITEMS						PREPARED	CHECK	APPROVED
			3	JUL-25-2001	Revise relevant spec and parameter	DOCUMENT CENTER				李海清	李海清	陳育仁	
I-ENG-63-01						2001.7.25							
PROCESS	EQUIPMENT TOOL	CONTROL PARAMETER		INSPECTION METHODS			CONTROL METHODS			INSPECTOR	RESPONSIBILITY	REMARK	
				FREQUENCY	TOOLS	CRITERIA	RECORD	PROCEDURE	VIOLATION				
MTL preparation	SOLDER IRON	TEMPERATURE :343~440℃	TEMPERATURE	1 TIME/DAY	THERMOMETER	TEMP WITHIN SPEC	IRON TEMP RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV		
	SCREW DRIVER	6~8 Kg/cm ²	TORQUE	1 TIME/DAY	TORQUE METER	TORQUE WITHIN SPEC	TORQUE RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV		
	ESD -WRIST STRAP	RESISTOR :0.8~9 Mohm	RESISTOR	Sample	ESD TESTER	RESISTOR WITHIN SPEC	ESD CHECK REPORT	G-QRA-05	REPLACED	IPQC	IPQC SUPV		
INSERT	Material or Part	---	BOM	FIRST CHECK	VISUAL CHECK	MATCH BOM	PILOT RUN REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV		
	ESD -WRIST STRAP	RESISTOR :0.8~9 Mohm	RESISTOR	1 TIME/DAY	ESD TESTER	RESISTOR IN SPEC	ESD CHECK REPORT	G-QRA-05	CHANGE	IPQC	IPQC SUPV		
SOLDER WAVE	SOLDER WAVE	TEMP:245 +/- 5 °C	TEMPERATURE	1 TIME/2H	THERMOMETER	TEMP WITHIN SPEC	X BAR-R CHART	W-ENG-02	ADJUST	TECH	ENGR SUPV		
	PRESURE GAUGE	PRESURE: 3±1kg/cm ²	TANK PRESURE	1 TIME/DAY	VISUAL CHECK	PRESURE WITHIN SPEC	MAINTAIN RPT	W-ENG-02	ADJUST	TECH	ENGR SUPV		
	PREHEAT	TEMP:250 ~500 °C	SURFACE TEMP	1 TIME/2H	THERMOMETER	TEMP WITHIN SPEC	MAINTAIN RPT	W-ENG-02	STOP LINE	TECH	ENGR SUPV		
	FLUX CONTAINER	0.81 +/- 0.02	FLUX GRAVITY	1 TIME/2H	HYDROMETER	GRAVITY WITHIN SPEC	CONTROL RECORD	W-ENG-02	STOP LINE	TECH	ENGR SUPV		
	CONVEY	SPEED:1.2~1.8 M/min.	CHAIN SPEED	1 TIME/2H	SPEED MONITOR	SPEED IN SPEC	MAINTAIN RPT	W-ENG-02	ADJUST	TECH	ENGR SUPV		
INSP	TOUCH-UP	SOLDER IRON ESD -WRIST STRAP	TEMP:343~440℃ RESISTOR:0.8~9 Mohm	TEMPERATURE RESISTOR	1 TIME/DAY 1 TIME/DAY	THERMOMETER ESD TESTER	TEMP WITHIN SPEC RESISTOR IN SPEC	IRON TEMP RECORD ESD CHECK REPORT	G-QRA-05 G-QRA-05	ADJUST REPLACED	IPQC IPQC	IPQC SUPV IPQC SUPV	
	QC	Soldering Surface	Soldering Inspection Standard	SOLDER POINT	100%	VISUAL CHECK	SOLDER JOINT OK	TOUCH-UP INSPECT REPORT	G-QRA-05	RETURN	IPQC	IPQC SUPV	
CASE ASS'Y		SOLDER IRON	TEMP:343~440℃	TEMPERATURE	1 TIME/DAY	THERMOMETER	TEMP WITHIN SPEC	IRON TEMP RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV	
		SCREW DRIVER	TORGUE :4~11 Kg/cm2	TORQUE	1 TIME/DAY	TORQUE METER	TORQUE WITHIN SPEC	TORQUE RECORD	G-QRA-05	CHANGE AND ADJUST	IPQC	IPQC SUPV	
IPQC		---	---	APPEARANCE,LAB EL.ELECTRONICS	25PCS/1H	VISUAL CHECK	NO DEFECT	IPQC REPORT	G-QRA-05	RETURN	IPQC	IPQC SUPV	
TEST	HI POT TEST 1	HI POT TESTER	3000V(DC) I<5uA 3S 2200V(AC)1mA<I<6mA 1S	SAMPLE TEST	1 TIME/2H	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV	
	BURN IN	BURN IN ROOM	ENVIROMENT :40+/- 5°C TIME: 4HRS.	TEMPERATURE	1 TIME/2H	TEMP CONTROLLER	TEMP IN SPEC	X BAR-R CHART	G-QRA-05	STOP BURN-IN	IPQC	IPQC SUPV	
		BURN IN CART	'LOAD : 80% ~ 100%	LOAD RESISTOR	1 TIME/WEEK	MULTI-METER	RESISTANCE CONFORM	B/I ROOM CHECK REPORT	W-ENG-02	STOP TO REPAIR	TECH	ENGR SUPV	
		---	---	LED	1 TIME/DAY	VISUAL CHECK	LED ALWAYS ON	B/I ROOM CHECK REPORT	G-QRA-05	RETURN TO CASE ASS'Y RETEST	IPQC	IPQC SUPV	
	---	---	IN/OUT TIME	1 TIME/DAY	VISUAL CHECK	4HOURS	B/I ROOM CHECK REPORT	W-ENG-01	REBURN-IN	IPQC	IPQC SUPV		
	HI POT TEST 2	HI POT TESTER	3000V(DC) I<6uA 3S 2200V(AC)1mA<I<6mA 1S	SAMPLE TEST	1 TIME/2H	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV	
	CABLE TEST	CABLE TEST FIXTURE	CONTINUITY	SAMPLE TEST	2TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	REPLACED	IPQC	IPQC SUPV	
	ATE	ATE TESTER	FILE NAME SAME AS MODEL NAME	SAMPLE TEST	2 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP	IPQC	IPQC SUPV	
OOBA INSPECTION	HI POT TESTER	3000V(DC) I<30uA 3S 2200V(AC) 1mA<I<10mA 1S	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
	CABLE TEST FIXTURE	CONTINUITY	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
	ATE TESTER	FILE NAME SAME AS MODEL NAME	VISUAL CHECK	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
SHIPPING		---	---	EVERY S/O			MATCH S/O	F/G SHIPPED CHECK LIST	G-QRA-06	RETURN	OOBA	OOBA SUPV	

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			3	MAR-16-2001	1.新制定.							唐海平	黄思彬	何施甫
I-ENG-63-02														
PROCESS		EQUIPMENT TOOL	CONTROL PARAMETER		INSPECTION METHODS			CONTROL METHODS			INSPECTOR	RESPONSIBILITY	REMARK	
					FREQUENCY	TOOLS	CRITERIA	RECORD	PROCEDURE	VIOLATION				
MTL PREPARATION	SOLDER IRON	TEMPERATURE :343~440℃	TEMPERATURE	1 TIME/DAY	THERMOMETER	TEMP WITHIN SPEC	IRON TEMP RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV			
	SCREW DRIVER	6~8 Kg/cm ²	TORQUE	1 TIME/DAY	TORQUE METER	TORQUE WITHIN SPEC	TORQUE RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV			
	FIXTURE TEST	ALARM WHEN SHORT	FIXTURE SHORT	2TIMES/DAY	DEFECT UNIT	SHORT	IPQC REPORT	G-QRA-05	REPAIR	IPQC	IPQC SUPV			
	ESD -WRIST STRAP	RESISTOR :0.8~9 Mohm	RESISTOR	1 TIME/DAY	ESD TESTER	RESISTOR WITHIN SPEC	ESD CHECK REPORT	G-QRA-05	REPLACED	IPQC	IPQC SUPV			
INSERT	---	---	BOM	FIRST CHECK	VISUAL CHECK	MATCH BOM	PILOT RUN REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV			
	ESD -WRIST STRAP	RESISTOR :0.8~9 Mohm	RESISTOR	1 TIME/DAY	ESD TESTER	RESISTOR IN SPEC	ESD CHECK REPORT	G-QRA-05	CHANGE	IPQC	IPQC SUPV			
SOLDER WAVE	SOLDER WAVE	TEMP:245 +/- 5 °C	TEMPERATURE	1 TIME/2H	THERMOMETER	TEMP WITHIN SPEC	X BAR-R CHART	W-ENG-02	ADJUST	TECH	ENGR SUPV			
	PRESURE GAUGE	PRESURE: 3±1kg/cm ²	TANK PRESURE	1 TIME/DAY	VISUAL CHECK	PRESURE WITHIN SPEC	MAINTAIN RPT	W-ENG-02	ADJUST	TECH	ENGR SUPV			
	PREHEAT	TEMP:250 ~500 °C	SURFACE TEMP	1 TIME/2H	THERMOMETER	TEMP WITHIN SPEC	MAINTAIN RPT	W-ENG-02	STOP LINE	TECH	ENGR SUPV			
	FLUX CONTAINER CONVEY	0.81 +/- 0.02 SPEED:1.2~1.8 M/min.	FLUX GRAVITY CHAIN SPEED	1 TIME/2H	HYDROMETER SPEED MONITOR	GRAVITY WITHIN SPEC SPEED IN SPEC	CONTROL RECORD MAINTAIN RPT	W-ENG-02 W-ENG-02	STOP LINE ADJUST	TECH	ENGR SUPV			
INSP	TOUCH-UP	SOLDER IRON ESD -WRIST STRAP	TEMP:343~440℃ RESISTOR:0.8~9 Mohm	TEMPERATURE RESISTOR	1 TIME/DAY 1 TIME/DAY	THERMOMETER ESD TESTER	TEMP WITHIN SPEC RESISTOR IN SPEC	IRON TEMP RECORD ESD CHECK REPORT	G-QRA-05 G-QRA-05	ADJUST REPLACED	IPQC IPQC	IPQC SUPV IPQC SUPV		
	QC	---	---	SOLDER POINT	100%	VISUAL CHECK	SOLDER JOINT OK	TOUCH-UP INSPECT REPORT	G-QRA-05	RETURN	IPQC	IPQC SUPV		
	ICT TEST	ICT TESTER	FILE NAME SAME AS WORK INSTRUCTION	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	SAMPLE TEST PASS	IPQC REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV		
CASE ASS'Y		SOLDER IRON	TEMP:343~440℃	TEMPERATURE	1 TIME/DAY	THERMOMETER	TEMP WITHIN SPEC	IRON TEMP RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV		
		SCREW DRIVER	TORGUE :4~11 Kg/cm2	TORQUE	1 TIME/DAY	TORQUE METER	TORQUE WITHIN SPEC	TORQUE RECORD	G-QRA-05	CHANGE AND ADJUST	IPQC	IPQC SUPV		
INITIAL TEST		ACT TESTER	OUTPUT:DC ±5 V AND ±12V WITHIN 5%	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	REPAIR	IPQC	IPQC SUPV		
IPQC		---	---	APPEARANCE,LAB EL,ELECTRONICS	25PCS/1H	VISUAL CHECK	NO DEFECT	IPQC REPORT	G-QRA-05	RETURN	IPQC	IPQC SUPV		
TEST	BURN IN	BURN IN ROOM	ENVIROMENT :40+/- 5℃ TIME: 4HRS. LOAD : 80% ~ 100%	TEMPERATURE	1 TIME/2H	TEMP CONTROLLER	TEMP IN SPEC	X BAR-R CHART	G-QRA-05	STOP BURN-IN	IPQC	IPQC SUPV		
		BURN IN CART		LOAD RESISTOR	1 TIME/WEEK	MULTI-METER	RESISTANCE CONFORM	B/I ROOM CHECK REPORT	W-ENG-02	STOP TO REPAIR	TECH	ENGR SUPV		
		---	---	LED	1 TIME/DAY	VISUAL CHECK	LED ALWAYS ON	B/I ROOM CHECK REPORT	G-QRA-05	RETURN TO CASE ASS'Y RETEST	IPQC	IPQC SUPV		
		---	---	IN/OUT TIME	1 TIME/DAY	VISUAL CHECK	4HOURS	B/I ROOM CHECK REPORT	W-ENG-01	REBURN-IN	IPQC	IPQC SUPV		
	HIPOT TEST	HIPOT TESTER	3000V(DC) I<30uA 2SEC	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV		
	CABLE TEST	CABLE TEST FIXTURE	CONTINUITY	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	REPLACED	IPQC	IPQC SUPV		
OOBA INSPECTION	ATE	ATE TESTER	FILE NAME SAME AS MODEL NAME	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP	IPQC	IPQC SUPV		
	HIPOT TESTER	3000V(DC) I<30uA 2SEC	CONTINUITY	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
								FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
								FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
SHIPPING		---	---	EVERY S/O			MATCH S/O	F/G SHIPPED CHECK LIST	G-QRA-06	RETURN	OOBA	OOBA SUPV		

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			3	JUL-25-2001							Revise relevant spec and parameter			
I-ENG-63-03														
PROCESS	EQUIPMENT TOOL	CONTROL PARAMETER		INSPECTION METHODS			CONTROL METHODS			INSPECTOR	RESPONSIBILITY	REMARK		
				FREQUENCY	TOOLS	CRITERIA	RECORD	PROCEDURE	VIOLATION					
MTL preparation	SOLDER IRON	TEMPERATURE :343~440℃	TEMPERATURE	1 TIME/DAY	THERMOMETER	TEMP WITHIN SPEC	IRON TEMP RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV			
	SCREW DRIVER	6~8 Kg/cm ²	TORQUE	1 TIME/DAY	TORQUE METER	TORQUE WITHIN SPEC	TORQUE RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV			
	ESD -WRIST STRAP	RESISTOR :0.8~9 Mohm	RESISTOR	Sample	ESD TESTER	RESISTOR WITHIN SPEC	ESD CHECK REPORT	G-QRA-05	REPLACED	IPQC	IPQC SUPV			
INSERT	Material or Part	---	BOM	FIRST CHECK	VISUAL CHECK	MATCH BOM	PILOT RUN REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV			
	ESD -WRIST STRAP	RESISTOR :0.8~9 Mohm	RESISTOR	1 TIME/DAY	ESD TESTER	RESISTOR IN SPEC	ESD CHECK REPORT	G-QRA-05	CHANGE	IPQC	IPQC SUPV			
SOLDER WAVE	SOLDER WAVE	TEMP:245 +/- 5 °C	TEMPERATURE	1 TIME/2H	THERMOMETER	TEMP WITHIN SPEC	X BAR-R CHART	W-ENG-02	ADJUST	TECH	ENGR SUPV			
	PRESURE GAUGE	PRESURE: 3±1kg/cm ²	TANK PRESURE	1 TIME/DAY	VISUAL CHECK	PRESURE WITHIN SPEC	MAINTAIN RPT	W-ENG-02	ADJUST	TECH	ENGR SUPV			
	PREHEAT	TEMP:250 ~500 °C	SURFACE TEMP	1 TIME/2H	THERMOMETER	TEMP WITHIN SPEC	MAINTAIN RPT	W-ENG-02	STOP LINE	TECH	ENGR SUPV			
	FLUX CONTAINER	0.81 +/- 0.02	FLUX GRAVITY	1 TIME/2H	HYDROMETER	GRAVITY WITHIN SPEC	CONTROL RECORD	W-ENG-02	STOP LINE	TECH	ENGR SUPV			
	CONVEY	SPEED:1.2~1.8 M/min.	CHAIN SPEED	1 TIME/2H	SPEED MONITOR	SPEED IN SPEC	MAINTAIN RPT	W-ENG-02	ADJUST	TECH	ENGR SUPV			
INSP	TOUCH-UP	SOLDER IRON ESD -WRIST STRAP	TEMP:343~440℃ RESISTOR:0.8~9 Mohm	TEMPERATURE RESISTOR	1 TIME/DAY 1 TIME/DAY	THERMOMETER ESD TESTER	TEMP WITHIN SPEC RESISTOR IN SPEC	IRON TEMP RECORD ESD CHECK REPORT	G-QRA-05 G-QRA-05	ADJUST REPLACED	IPQC IPQC	IPQC SUPV IPQC SUPV		
	QC	Soldering Surface	Soldering Inspection Standard	SOLDER POINT	100%	VISUAL CHECK	SOLDER JOINT OK	TOUCH-UP INSPECT REPORT	G-QRA-05	RETURN	IPQC	IPQC SUPV		
CASE ASS'Y		SOLDER IRON	TEMP:343~440℃	TEMPERATURE	1 TIME/DAY	THERMOMETER	TEMP WITHIN SPEC	IRON TEMP RECORD	G-QRA-05	REPLACED	IPQC	IPQC SUPV		
		SCREW DRIVER	TORGUE :4~11 Kg/cm2	TORQUE	1 TIME/DAY	TORQUE METER	TORQUE WITHIN SPEC	TORQUE RECORD	G-QRA-05	CHANGE AND ADJUST	IPQC	IPQC SUPV		
IPQC		---	---	APPEARANCE,LAB EL,ELECTRONICS	25PCS/1H	VISUAL CHECK	NO DEFECT	IPQC REPORT	G-QRA-05	RETURN	IPQC	IPQC SUPV		
TEST	HI POT TEST 1	HI POT TESTER	3000V(DC) I<6uA 3S 2200V(AC)1mA<I<6mA 1S	SAMPLE TEST	1 TIME/2H	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV		
	BURN IN	BURN IN ROOM	ENVIROMENT :40+/- 5°C TIME: 4HRS.	TEMPERATURE	1 TIME/2H	TEMP CONTROLLER	TEMP IN SPEC	X BAR-R CHART	G-QRA-05	STOP BURN-IN	IPQC	IPQC SUPV		
		BURN IN CART	'LOAD : 80% ~ 100%	LOAD RESISTOR	1 TIME/WEEK	MULTI-METER	RESISTANCE CONFORM	B/I ROOM CHECK REPORT	W-ENG-02	STOP TO REPAIR	TECH	ENGR SUPV		
		---	---	LED	1 TIME/DAY	VISUAL CHECK	LED ALWAYS ON	B/I ROOM CHECK REPORT	G-QRA-05	RETURN TO CASE ASS'Y RETEST	IPQC	IPQC SUPV		
	---	---	IN/OUT TIME	1 TIME/DAY	VISUAL CHECK	4HOURS	B/I ROOM CHECK REPORT	W-ENG-01	REBURN-IN	IPQC	IPQC SUPV			
	HI POT TEST 2	HI POT TESTER	3000V(DC) I<7uA 3S 2200V(AC)1mA<I<6mA 1S	SAMPLE TEST	1 TIME/2H	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP LINE	IPQC	IPQC SUPV		
	CABLE TEST	CABLE TEST FIXTURE	CONTINUITY	SAMPLE TEST	2TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	REPLACED	IPQC	IPQC SUPV		
	ATE	ATE TESTER	FILE NAME SAME AS MODEL NAME	SAMPLE TEST	2 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	IPQC REPORT	G-QRA-05	STOP	IPQC	IPQC SUPV		
OOBA INSPECTION		HI POT TESTER	3000V(DC) I<30uA 3S 2200V(AC) 1mA<I<10mA 1S	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
		CABLE TEST FIXTURE ATE TESTER	CONTINUITY FILE NAME SAME AS MODEL NAME	SAMPLE TEST	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
				VISUAL CHECK	1 TIME/DAY	STANDARD UNIT	TEST SAMPLE PASS	FINAL PRODUCT CHECK LIST	G-QRA-06	STOP TO REPAIR	OOBA	OOBA SUPV		
SHIPPING		---	---	EVERY S/O			MATCH S/O	F/G SHIPPED CHECK LIST	G-QRA-06	RETURN	OOBA	OOBA SUPV		