

VR – Process 7
 Process
Revision History

Pass Panel Through Heat

Date / Time	Rev	Author	Description
8/26/2017	A	FS	Original Version

Approvals

Rev	Approval	Customer	Engineering	Mechanical	Software	Mfg	OPS	QA	Test	Sales	Support	Corp
A	DT											
	Initial		FS									

1.0 Process Description

Description	Apply Glue to FR4 and HDPE
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VR Part Number	VR1
Customer Part Number	355467-01
Configuration	Standard
Model	SRA-16(20x69]
Process Number	VR102601-07

Process Standard	
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2. Setup

2.1 Technician

Tech #	Certification Required	Skill	Process	Safety
1	No	None	Yes	Yes


2.2 Tools

2.2.1 Calibrated Tools

Number	Tool	Description	Rev	Specification	Calibration Requirements	Image
1	Heat Chamber Temp Sensor	Temp Sensor used to control temperature inside the heat chamber.	1	Temperature controlled at 100degrees Celsius	To be checked every year against a calibrated temperature controlled chamber.	

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2	Heat Chamber Tachometer	Tachometer used to verify conveyor speed		Speed controlled at 11RPM	Calibrated oscilloscope needs to be used to check tachometer output pulses.	
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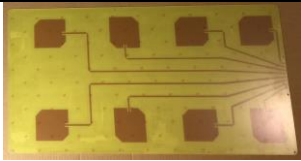
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2.2.2 Non-Calibrated Tools


Number	Tool	Type	Reference	Image
1	Heat Lamp	1500W Heat Lamp	3x Heat Lamp of 1500W	
2	J-Roller for Plastic Laminate	J-Roller	3 in. J-Roller for up to 25PSI	

2.3 Materials

#	VR Part Number	Mfg Part #	Manuf	Description	Qty	Requires Serial #	Size	Tolerance	COC Req	Lot Req	Incoming QA Req	Image
1	VR102651	See BOM	See BOM	FR4 Sheet (21" x 48")	2	N	See Engineering Drawing	See Engineering Drawing	Y	Y	Y	

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2	VR102681	See BOM	See BOM	3/8" HDPE – Front Side	1	N	See Engineering Drawing	See Engineering Drawing	Y	Y	Y	
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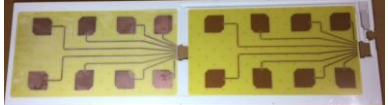
2.4 References

Number	VR Doc Number	Rev	Manuf	Description	Directory
1					

2.5 Safety

Number	Type	Description	Reference
1	Heat Resistant Safety Gloves	Use of heat resistant gloves while placing and removing material from heat chamber is required.	Refer to MSDS
2	Safety Power Cut Off Training	All personnel working with or around gluing area needs to be able to use safety power cutoff switch.	VR internal training

Procedure (Pass Panel through Heat Process and Attach FR4)

Step	Tech	Tool	Material	Tasks description	Reference Drawing	Image
1	1		M-2	Place HDPE panel on top of conveyor, glue facing up and board side towards the heat chamber. Wait for it to come out the other side of the chamber.		
2	1		M-1	Once HDPE panels has come out the other side you can safely place the FR4 panel on top of conveyor. The glued side should be facing up and the board side should be towards the heat chamber. Wait for it to come out the other side of the chamber.		
3	1	Hand	M-1, M-2	Place the glued side of the FR4 panel on top of the glued side of the HDPE panel.		

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4	1	NC-2	M-1, M-2	Use the hand roller to bind both panels, applying even pressure throughout the FR4 panel.		
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4.0 Process Recording

Step	Tasks description	Reference Drawing / Image
1		

5.0 Non Compliance

#	Non Compliance	Disposition	Reference Drawing / Image
1	Glued FR4 not aligned with HDPE antenna cutout or mux lead wires.	Unit has to go back to rework area where FR4 and HDPE will be taken apart and cleaned.	