

IENSO INC.	TITLE
20 Mural Street Unit 7 Richmond Hill, ON L4B 1K3 Canada	IEN0015-06 (EV3 Processor Board-Ordinary Vias)
Phone: 905.763.6938x250	100548
	Date March 15, 2013
	Contact: Kamran Sabeti

GERBER FILE
EXTENSION

Layer Stack Up Detail for: IEN0015-06		
Layer Name	FR4 0.0452"	
.GTL	Top Layer 0.5 oz	Prepreg Top layer to Internal Plane 1: 3.3 mils
.GP1	GND1 Internal Plane 1: 0.5 oz	Core Internal Plane 1 to Middle Layer 1: 5 mils
.G1	MID 1 Signal Middle Layer 1: 0.5 oz	Prepreg Middle Layer 1 to Internal Plane 2: 5 mils
.GP2	PWR 1 Internal Plane 2: 0.5 oz	Core Internal Plane 2 to Middle Layer 2: 5 mils
.G2	MID 2 Signal Middle Layer 2: 0.5 oz	Prepreg Middle Layer 2 to Middle Layer 3: 5 mils
.G3	MID 3 Signal Middle Layer 3: 0.5 oz	Core Middle Layer 3 to Internal Plane 3: 5 mils
.GP3	PWR2 Internal Plane 3: 0.5 oz	Prepreg Internal Plane 3 to Middle Layer 4: 5 mils
.G4	MID 4 Signal Middle Layer 4: 0.5 oz	Core Middle Layer 4 to Internal Plane 4: 5 mils
.GP4	GND2 Internal Plane 4: 0.5 oz	Prepreg Internal Plane 4 to Bottom Layer : 3.3 mils
.GBL	Bottom Layer 0.5 oz	

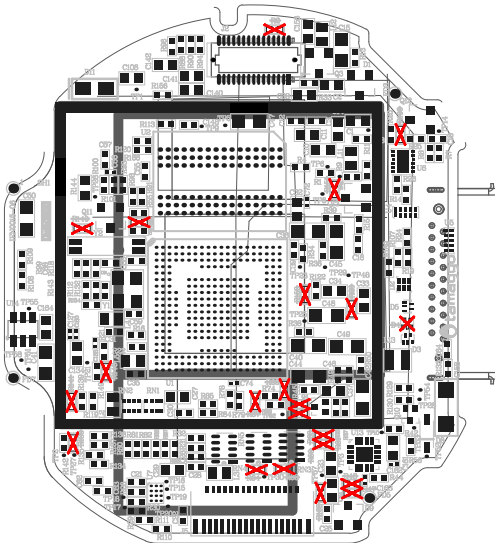
IMPEDANCE CONTROL (SINGLE TRACES)

Layers TOP & BOTTOM	Single-ended	50 Ohms +/- 10% where track width is 4.45 mil
Mid-Layers 1 & 4	Single-ended	50 Ohms +/-10% where track width is 4.05 mil
Mid-Layers 2 & 3	Single-ended	50 Ohms +/-10% where track width is 4.6 mil

IMPEDANCE CONTROL (DIFFERENTIAL PAIRS)

Layers TOP & BOTTOM	Diff pairs	100 Ohms +/-10% where track width is 4.00 mil and spacing between tracks edge-to-edge is 9.0 mil
Mid-Layers 1 & 4	Diff pairs	100 Ohms +/-10% where track width is 4.00 mil and spacing between tracks edge-to-edge is 10.0 mil
Mid-Layers 2 & 3	Diff pairs	100 Ohms +/-10% where track width is 4.00 mil and spacing between tracks edge-to-edge is 6.0 mil

Layers TOP & BOTTOM	Diff pairs	90 Ohms +/-10% where track width is 4.80 mil and spacing between tracks edge-to-edge is 8.0 mil
Mid-Layers 1 & 4	Diff pairs	90 Ohms +/-10% where track width is 4.80 mil and spacing between tracks edge-to-edge is 8.0 mil
Mid-Layers 2 & 3	Diff pairs	90 Ohms +/-10% where track width is 4.80 mil and spacing between tracks edge-to-edge is 5.0 mil



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.GP2	PWR 1 Internal Plane 2: 0.5 oz	Core Internal Plane 2 to Middle Layer 2: 5 mils
.G2	MID 2 Signal Middle Layer 2: 0.5 oz	Prepreg Middle Layer 2 to Middle Layer 3: 5 mils
.G3	MID 3 Signal Middle Layer 3: 0.5 oz	Core Middle Layer 3 to Internal Plane 3: 5 mils
.GP3	PWR2 Internal Plane 3: 0.5 oz	Prepreg Internal Plane 3 to Middle Layer 4: 5 mils
.G4	MID 4 Signal Middle Layer 4: 0.5 oz	Core Middle Layer 4 to Internal Plane 4: 5 mils
.GP4	GND2 Internal Plane 4: 0.5 oz	Prepreg Internal Plane 4 to Bottom Layer : 3.3 mils
.GBL	Bottom Layer 0.5 oz	

IMPEDANCE CONTROL (SINGLE TRACES)

Layers TOP & BOTTOM	Single-ended	50 Ohms +/- 10% where track width is 4.45 mil
Mid-Layers 1 & 4	Single-ended	50 Ohms +/-10% where track width is 4.05 mil
Mid-Layers 2 & 3	Single-ended	50 Ohms +/-10% where track width is 4.6 mil

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Mid-Layers 2 & 3	Diff pairs	90 Ohms +/-10% where track width is 4.80 mil and spacing between tracks edge-to-edge is 5.0 mil

