

Product Number:B018400C04A0

Shenzhen BenQiang Circuit Co.,Ltd

Customer Number:BeagleBone Green Eco

Stackup Information					
<div>L1</div> <div></div> <div></div> <div>L2</div> <div>L3</div> <div></div> <div>L4</div>	Type	Material	Parameter	Residual Copper	Thickness(mm)
	OZ		0.33_PT_1OZ	100	0.036
	PP	Shengyi S1000HB	1080(69)(TG150) 0.0831	/	0.0744
	Core	KB KB-6160	1OZ	73	0.032
			1.3(include copper)TG135	/	1.23
			1OZ	71	0.032
	PP	Shengyi S1000HB	1080(69)(TG150) 0.0831	/	0.0738
	OZ		0.33_PT_1OZ	100	0.036

PressBoardThickness:1.47mm
finishBoardThickness:1.60(+0.16/-0.16)mm
Compression cannot be changed

Impedance Information											
NO	Imp Type	Control Layer	Reference Layer	Original Line Width(Mil)	Original Line Spacing(Mil)	Original Line ToCopper(Mil)	Adjust Line Width(Mil)	Adjust Line Spacing(Mil)	Adjust Line ToCopper(Mil)	Required Resistance(Ω)	Actual Resistance&Tolerance (Ω)
1	Single-ended	L1	L2	4.75			4.55			50	49.44±5
2	Single-ended	L2	L1/L3	4.75			3.75			50	49.24±5
3	Single-ended	L3	L2/L4	4.75			3.75			50	49.05±5
4	Single-ended	L4	L3	4.75			4.55			50	49.2±5
5	Differential I	L1	L2	4.5	6.5		4.5	6.5		90	90.46±9
6	Differential I	L4	L3	4.5	6.5		4.5	6.5		90	90.12±9
7	Differential I	L1	L2	3.75	7.25		3.7	7.3		100	99.99±10

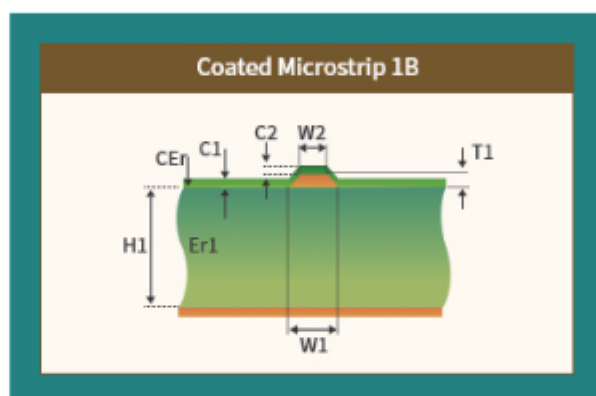
8	Differentia I	L4	L3	3.75	7.25		3.7	7.3		100	99.63±10
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Impedance Model

O_S(SM)

Coated Microstrip 1B

Original LineWidth	4.75	Mil
Adjust LineWidth	4.55	Mil
Original LineSpacing	/	Mil
Adjust LineSpacing	/	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	50	Ω



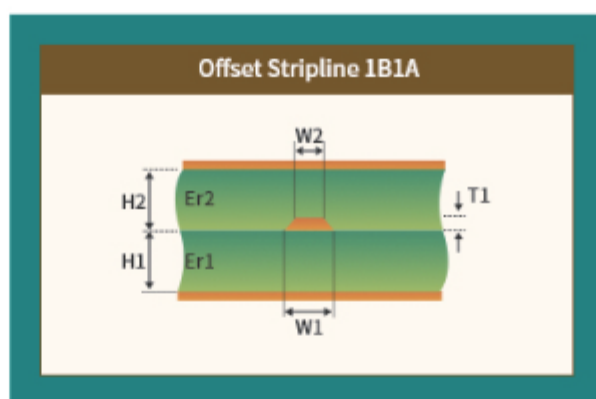
H1	2.93	Mil
Er1	4.21	
W1	4.55	Mil
W2	3.55	Mil
T1	1.417	Mil
C1	1.42	Mil
C2	0.5	Mil
C3	1.48	Mil
CEr	3.4	
Imp	49.44	Ω

Control Layer:L1; Upper reference:/; Lower reference:L2;

I_S_2

Offset Stripline 1B1A

Original LineWidth	4.75	Mil
Adjust LineWidth	3.75	Mil
Original LineSpacing	/	Mil
Adjust LineSpacing	/	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	50	Ω



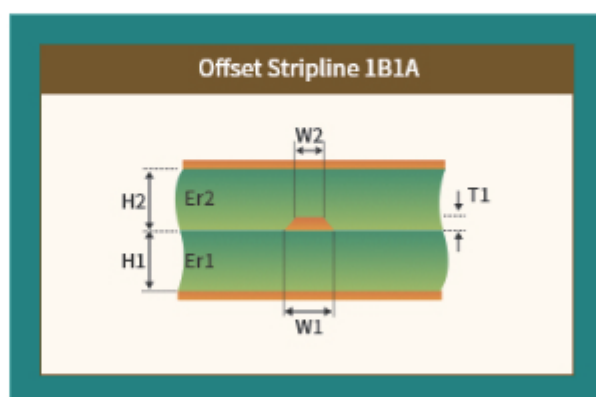
H1	48.425	Mil
Er1	4.56	
H2	4.19	Mil
Er2	4.21	
W1	3.75	Mil
W2	2.75	Mil
T1	1.26	Mil
Imp	49.24	Ω

Control Layer:L2; Upper reference:L1; Lower reference:L3;

I_S_2

Offset Stripline 1B1A

Original LineWidth	4.75	Mil
Adjust LineWidth	3.75	Mil
Original LineSpacing	/	Mil
Adjust LineSpacing	/	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	50	Ω



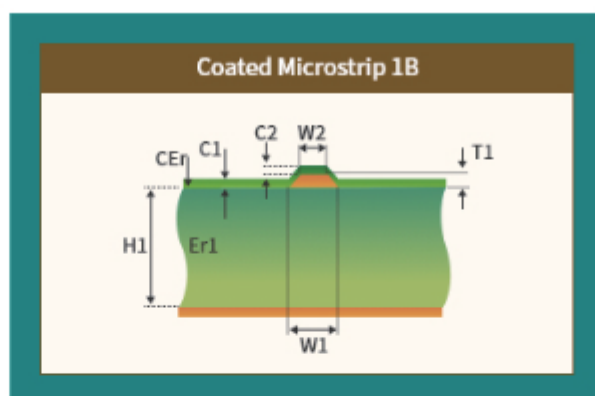
H1	48.425	Mil
Er1	4.56	
H2	4.165	Mil
Er2	4.21	
W1	3.75	Mil
W2	2.75	Mil
T1	1.26	Mil
Imp	49.05	Ω

Control Layer:L3; Upper reference:L2; Lower reference:L4;

O_S(SM)

Coated Microstrip 1B

Original LineWidth	4.75	Mil
Adjust LineWidth	4.55	Mil
Original LineSpacing	/	Mil
Adjust LineSpacing	/	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	50	Ω



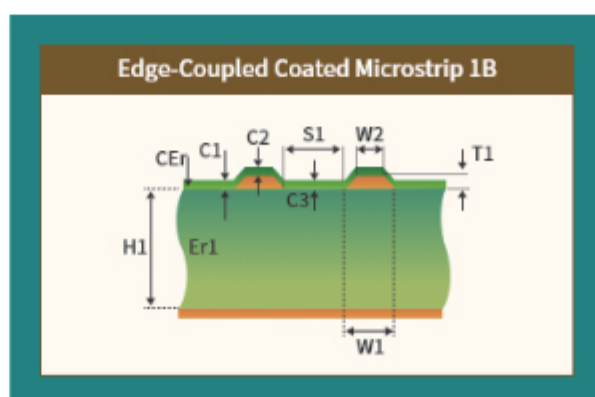
H1	2.905	Mil
Er1	4.21	
W1	4.55	Mil
W2	3.55	Mil
T1	1.417	Mil
C1	1.42	Mil
C2	0.5	Mil
C3	1.48	Mil
CEr	3.4	
Imp	49.2	Ω

Control Layer:L4; Upper reference:L3; Lower reference:/;

O_D(SM)

Edge-Coupled Coated Microstrip 1B

Original LineWidth	4.5	Mil
Adjust LineWidth	4.5	Mil
Original LineSpacing	6.5	Mil
Adjust LineSpacing	6.5	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	90	Ω



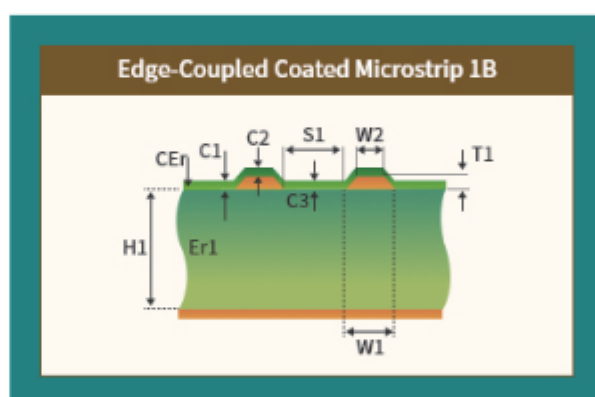
H1	2.93	Mil
Er1	4.21	
W1	4.5	Mil
W2	3.5	Mil
S1	6.5	Mil
T1	1.417	Mil
C1	1.42	Mil
C2	0.5	Mil
C3	1.48	Mil
CEr	3.4	
Imp	90.46	Ω

Control Layer:L1; Upper reference:/; Lower reference:L2;

O_D(SM)

Edge-Coupled Coated Microstrip 1B

Original LineWidth	4.5	Mil
Adjust LineWidth	4.5	Mil
Original LineSpacing	6.5	Mil
Adjust LineSpacing	6.5	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	90	Ω



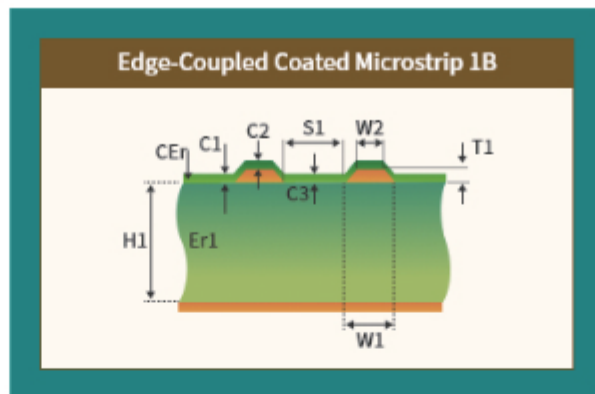
H1	2.905	Mil
Er1	4.21	
W1	4.5	Mil
W2	3.5	Mil
S1	6.5	Mil
T1	1.417	Mil
C1	1.42	Mil
C2	0.5	Mil
C3	1.48	Mil
CEr	3.4	
Imp	90.12	Ω

Control Layer:L4; Upper reference:L3; Lower reference:/;

O_D(SM)

Edge-Coupled Coated Microstrip 1B

Original LineWidth	3.75	Mil
Adjust LineWidth	3.7	Mil
Original LineSpacing	7.25	Mil
Adjust LineSpacing	7.3	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	100	Ω



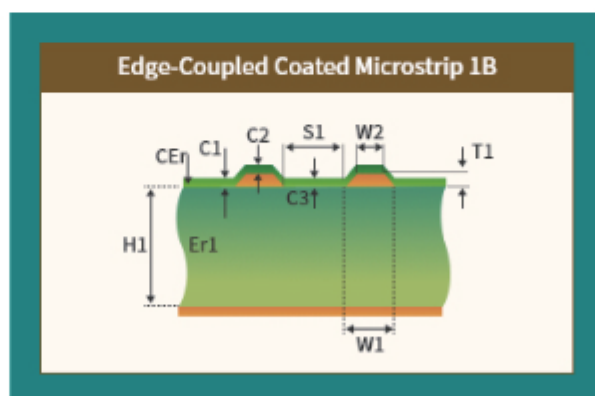
H1	2.93	Mil
Er1	4.21	
W1	3.7	Mil
W2	2.7	Mil
S1	7.3	Mil
T1	1.417	Mil
C1	1.42	Mil
C2	0.5	Mil
C3	1.48	Mil
CEr	3.4	
Imp	99.99	Ω

Control Layer:L1; Upper reference:/; Lower reference:L2;

O_D(SM)

Edge-Coupled Coated Microstrip 1B

Original LineWidth	3.75	Mil
Adjust LineWidth	3.7	Mil
Original LineSpacing	7.25	Mil
Adjust LineSpacing	7.3	Mil
Original Line To	/	Mil
Copper		
Adjust Line To Copper	/	Mil
Required Resistance	100	Ω



H1	2.905	Mil
Er1	4.21	
W1	3.7	Mil
W2	2.7	Mil
S1	7.3	Mil
T1	1.417	Mil
C1	1.42	Mil
C2	0.5	Mil
C3	1.48	Mil
CEr	3.4	
Imp	99.63	Ω

Control Layer:L4; Upper reference:L3; Lower reference:/;