



| Layer | Stack up | Description | Processed Thickness | Isolation Distance (Summed) | Copper Coverage | εr | Impedance ID |
|-------|----------|-----------------------------------|---------------------|-----------------------------|-----------------|-------|--------------|
| 1 | | ELECTRA EMP 110/5410- RED | 1.000 | | | 4.000 | |
| | | Copper Foil 12 microns | 1.850 | | 100.000 | | 1, 2, 3 |
| 2 | | Iteq IT180A Prepreg 1080 RC65-NEW | 2.315 | 4.630 | | 3.860 | |
| | | Iteq IT180A Prepreg 1080 RC65-NEW | 2.315 | - | | 3.860 | |
| 3 | | Iteq IT180A 47 mil core 2/2 | 2.638 | | 51.000 | | |
| | | Iteq IT180A 47 mil core 2/2 | 41.600 | 41.600 | | 3.770 | |
| 4 | | Iteq IT180A Prepreg 1080 RC65-NEW | 2.196 | 4.392 | | 3.860 | |
| | | Iteq IT180A Prepreg 1080 RC65-NEW | 2.196 | - | | 3.860 | |
| | | Copper Foil 12 microns | 1.850 | | 100.000 | | 4, 5, 6 |
| | | ELECTRA EMP 110/5410- RED | 1.000 | | | 4.000 | |

Copper Thickness = 8.977 | Dielectric Thickness = 50.622 | Solder Mask Thickness = 2.000 | Stack Up Thickness = 59.599 | Stack Up Thickness with Soldermask = 61.599

| Impedance ID | Impedance Signal Layer | Structure Name | Ref. Plane 1 in Layer | Ref. Plane 2 in Layer | Lower Trace Width (W1) | Trace Separation (S1) | Ground Strip Separation (D1) | Calculated Impedance | Target Impedance | Tol (+/- %) |
|--------------|------------------------|-----------------------------------|-----------------------|-----------------------|------------------------|-----------------------|------------------------------|----------------------|------------------|-------------|
| 1 | 1 | Coated Microstrip 1B | 2 | 0 | 5.900 | 0.000 | 0.000 | 56.170 | 50.000 | 10.000 |
| 2 | 1 | Edge Coupled Coated Microstrip 1B | 2 | 0 | 4.500 | 4.500 | 0.000 | 94.200 | 90.000 | 10.000 |
| 3 | 1 | Edge Coupled Coated Microstrip 1B | 2 | 0 | 4.000 | 6.000 | 0.000 | 105.900 | 100.000 | 10.000 |
| 4 | 4 | Coated Microstrip 1B | 3 | 0 | 5.900 | 0.000 | 0.000 | 54.600 | 50.000 | 10.000 |
| 5 | 4 | Edge Coupled Coated Microstrip 1B | 3 | 0 | 4.500 | 4.500 | 0.000 | 93.000 | 90.000 | 10.000 |
| 6 | 4 | Edge Coupled Coated Microstrip 1B | 3 | 0 | 4.000 | 6.000 | 0.000 | 104.420 | 100.000 | 10.000 |

Notes

| | | | | | | | |
|---|-----------------------|-----------|---------------|-------------------|------------|-----|--|
| StackName: MISTRAL-PROC177 REV B[CAM#59840]-A00 | Version: | Revision: | Modification: | Date of Revision: | Editor | Pag | |
| Date: 14-12-2023 | Associated Documents: | 1 | | 14-12-2023 | HARIPRASAD | | |
| Author: - | F14122023-59840-A00 | | | | | | |
| Department: Engg-CAM | | | | | | | |
| Site: www.hiqelectronics.com | | | | | | | |

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