

stack-up
Material:IT180A

Thickness:62 mil +/-10% Over soldermask

| Layer Name | Original design | | Founder's suggestion | | Copper Type | DK (1GHz) |
|------------|-----------------|------------------------------------|------------------------------------|-------------|-------------|-----------|
| | Build - up | Dielectric thickness (unit mil) | Dielectric thickness (unit mil) | Build - up | | |
| L1Top | 0.5oz+plating | | 0.5oz+plating | | H T E | |
| | PP | | 3.24 | PP | | 3.69 |
| L2 | 1oz | | 1oz | | H T E | |
| | CORE | | 3.94 | CORE | | 3.94 |
| L3 | 0.5oz | | 0.5oz | | H T E | |
| | PP | | | PP | | |
| | Etched CORE | | 38.00 | Etched CORE | | 4.13 |
| | PP | | | PP | | |
| L4 | 0.5oz | | 0.5oz | | H T E | |
| | CORE | | 3.94 | CORE | | 3.94 |
| L5 | 1oz | | 1oz | | H T E | |
| | PP | | 3.24 | PP | | 3.69 |
| L6Bottom | 0.5oz+plating | | 0.5oz+plating | | H T E | |

Single impedance list

| Layer name | Original design | | Founder's suggestion | | Reference layer |
|------------|----------------------|---------------------|----------------------|----------------------|-----------------|
| | line width(unit:mil) | impedance(unit:ohm) | line width(unit:mil) | impedance (unit:ohm) | |
| L1Top | 5.1 | 51+/-5.1 | 5.1 | 51+/-5.1 | L2 |
| L1Top | 4.5 | 54+/-5.4 | 4.5 | 54+/-5.4 | L2 |
| L1Top | 3.5 | 60+/-6 | 3.5 | 60+/-6 | L2 |
| L1Top | 5.3 | 50+/-5 | 5.3 | 50+/-5 | L2 |
| L3 | 5.3 | 51+/-5.1 | 5.3 | 51+/-5.1 | L4&L2 |
| L3 | 4.6 | 54+/-5.4 | 4.6 | 54+/-5.4 | L4&L2 |
| L3 | 3.6 | 60+/-6 | 3.6 | 60+/-6 | L4&L2 |
| L3 | 5.5 | 50+/-5 | 5.5 | 50+/-5 | L4&L2 |
| L6Bottom | 5.1 | 51+/-5.1 | 5.1 | 51+/-5.1 | L5 |
| L6Bottom | 4.5 | 54+/-5.4 | 4.5 | 54+/-5.4 | L5 |
| L6Bottom | 3.5 | 60+/-6 | 3.5 | 60+/-6 | L5 |
| L6Bottom | 5.3 | 50+/-5 | 5.3 | 50+/-5 | L5 |

Differential impedance list

| Layer name | Original design | | Founder's suggestion | | Reference layer |
|------------|-----------------------------|---------------------|-----------------------------|---------------------|-----------------|
| | line width/space(unit: mil) | impedance(unit:ohm) | line width/space(unit: mil) | impedance(unit:ohm) | |
| L1Top | 5.11/4.6 | 85+/-8.5 | 5.11/4.6 | 85+/-8.5 | L2 |
| L1Top | 4.51/4.8 | 90+/-9 | 4.51/4.8 | 90+/-9 | L2 |
| L1Top | 3.51/5 | 100+/-10 | 3.51/5 | 100+/-10 | L2 |
| L3 | 3.61/5.4 | 100+/-10 | 3.61/5.4 | 100+/-10 | L4&L2 |
| L3 | 4.61/5 | 90+/-9 | 4.61/5 | 90+/-9 | L4&L2 |
| L3 | 5.31/5.1 | 85+/-8.5 | 5.31/5.1 | 85+/-8.5 | L4&L2 |
| L6Bottom | 5.11/4.6 | 85+/-8.5 | 5.11/4.6 | 85+/-8.5 | L5 |
| L6Bottom | 4.51/4.8 | 90+/-9 | 4.51/4.8 | 90+/-9 | L5 |
| L6Bottom | 3.51/5 | 100+/-10 | 3.51/5 | 100+/-10 | L5 |