

## **PCB LAYER CONFIGURATION STACK-UPS**

Rev A

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|   | <u>02A</u>  | <u>02B</u>   | <u>02C</u>   |   |  |   |  |  |   |  |  |
|---|---|--|--|---|--|---|--|--|---|--|--|
| Layer 1   | (Top)   | (Top)  | (GND)  |   |  |   |  |  |   |  |  |
| Layer 2   | (Bottom)  | (GND)  | (Bottom)   |   |  | -   |  |  |   |  |  |
|   | 04A   | 04B  | 04C  | 04D   | 04E  | 04F   |  |  |   |  |  |
| Layer 1   | (Top)   | (Top)  | (PWR)  | (GND)   | (GND)  | (Top)   |  |  |   |  |  |
| Layer 2   | (GND)   | (PWR)  | (Signal)   | (Signal)  | (Sig/Pwr)  | (Signal)  |  |  |   |  |  |
| Layer 3   | (PWR)   | (GND)  | (Signal)   | (Signal)  | (Sig/Pwr)  | (Signal)  |  |  |   |  |  |
| Layer 4   | (Bottom)  | (Bottom)   | (GND)  | (PWR)   | (GND)  | (Bottom)  |  |  |   |  | _  |
|   | 06A   | 06B  | 06C  | 06D   | 06E  | 06F   | 06G  | 06H  | 06J   | 06K  | 06L  |
| Layer 1   | (Top)   | (Top)  | (Top)  | (Top)   | (GND)  | (GND)   | (Top)  | (Top)  | (Top)   | (Top)  | (Top)  |
| Layer 2   | (GND)   | (PWR)  | (Signal)   | (Signal)  | (Signal)   | (Signal)  | (GND)  | (GND)  | (PWR)   | (PWR)  | (Signal)   |
| Layer 3   | (Signal)  | (Signal)   | (GND)  | (PWR)   | (GND)  | (PWR)   | (Signal)   | (PWR)  | (GND)   | (Signal)   | (Signal)   |
| Layer 4   | (Signal)  | (Signal)   | (PWR)  | (GND)   | (PWR)  | (GND)   | (PWR)  | (Signal)   | (Signal)  | (GND)  | (Signal)   |
| Layer 5   | (PWR)   | (GND)  | (Signal)   | (Signal)  | (Signal)   | (Signal)  | (GND)  | (GND)  | (PWR)   | (PWR)  | (Signal)   |
| Layer 6   | (Bottom)  | (Bottom)   | (Bottom)   | (Bottom)  | (GND)  | (GND)   | (Bottom)   | (Bottom)   | (Bottom)  | (Bottom)   | (Bottom)   |
|   | <u>08A</u>  | 08B  | 08C  | 08D   | 08E  | <u>08F</u>  | 08G  | <u>08H</u>   | <u>08J</u>  | <u>08K</u>   | <u>08L</u>   |
| Layer 1   | (Top)   | (Top)  | (Top)  | (Top)   | (GND)  | (GND)   | (PWR)  | (GND)  | (Top)   | (Top)  | (Top)  |
| Layer 2   | (Signal)  | (Signal)   | (GND)  | (GND)   | (Signal)   | (Signal)  | (Signal)   | (Signal)   | (GND)   | (GND)  | (GND)  |
| Layer 3   | (GND)   | (PWR)  | (Signal)   | (Signal)  | (Signal)   | (Signal)  | (GND)  | (PWR)  | (Sig/Pwr)   | (PWR)  | (PWR)  |
| Layer 4   | (Signal)  | (Signal)   | (GND)  | (PWR)   | (GND)  | (PWR)   | (Signal)   | (Signal)   | (GND)   | (Signal)   | (Signal)   |
| Layer 5   | (Signal)  | (Signal)   | (PWR)  | (GND)   | (PWR)  | (GND)   | (Signal)   | (Signal)   | (Sig/Pwr)   | (Signal)   | (Signal)   |
| Layer 6   | (PWR)   | (GND)  | (Signal)   | (Signal)  | (Signal)   | (Signal)  | (PWR)  | (GND)  | (GND)   | (PWR)  | (GND)  |
| Layer 7   | (Signal)  | (Signal)   | (GND)  | (GND)   | (Signal)   | (Signal)  | (Signal)   | (Signal)   | (Sig/Pwr)   | (GND)  | (PWR)  |
| Layer 8   | (Bottom)  | (Bottom)   | (Bottom)   | (Bottom)  | (GND)  | (GND)   | (GND)  | (PWR)  | (Bottom)  | (Bottom)   | (Bottom)   |
|   |   |  |  |   |  |   |  |  |   |  |  |
|   | 10A   | <u>10B</u>   | 10C  | <u>10D</u>  | 10E  | 10F   | 10G  | <u>10H</u>   | <u>10J</u>  | <u>10K</u>   |  |
| Layer 1   | 10A<br>(Top)  | <b>10B</b> (Top)   | <b>10C</b> (Top)   | <b>10D</b><br>(Top)   | <b>10E</b> (Top)   | <b>10F</b> (Top)  | <b>10G</b> (GND)   | <b>10H</b> (GND)   | <b>10J</b> (GND)  | <b>10K</b> (GND)   |  |
| Layer 1<br>Layer 2  | 10A<br>(Top)<br>(GND)   | 10B<br>(Top)<br>(GND)  | 10C<br>(Top)<br>(GND)  | 10D<br>(Top)<br>(PWR)   | 10E<br>(Top)<br>(GND)  | 10F<br>(Top)<br>(GND)   | 10G<br>(GND)<br>(Signal)   | 10H<br>(GND)<br>(Signal)   | 10J<br>(GND)<br>(Signal)  | 10K<br>(GND)<br>(Signal)   |  |
| Layer 1<br>Layer 2<br>Layer 3   | 10A<br>(Top)<br>(GND)<br>(Signal)   | 10B<br>(Top)<br>(GND)<br>(Signal)  | 10C<br>(Top)<br>(GND)<br>(Signal)  | 10D<br>(Top)<br>(PWR)<br>(Signal)   | 10E<br>(Top)<br>(GND)<br>(Signal)  | 10F<br>(Top)<br>(GND)<br>(Signal)   | 10G<br>(GND)<br>(Signal)<br>(Signal)   | 10H<br>(GND)<br>(Signal)<br>(Signal)   | 10J<br>(GND)<br>(Signal)<br>(GND)   | 10K<br>(GND)<br>(Signal)<br>(PWR)  |  |
| Layer 1<br>Layer 2<br>Layer 3<br>Layer 4  | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)   | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)  | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)   | 10E<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)   | 10F<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)  | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)  | (GND)<br>(Signal)<br>(GND)<br>(PWR)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)   |  |
| Layer 1<br>Layer 2<br>Layer 3<br>Layer 4<br>Layer 5   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)  | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)   | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)  | 10E<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)  | 10F<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)  | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)  | 10J<br>(GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)  | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)   |  |
| Layer 1<br>Layer 2<br>Layer 3<br>Layer 4<br>Layer 5<br>Layer 6  | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)   | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)  | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)   | 10E<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)  | 10F<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)  | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)  | 10J<br>(GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)  | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)   |  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)   | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)  | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)   | 10E<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)   | 10F<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(PWR)   | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)   | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)   | 10J<br>(GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)  |  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)   | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)  | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)   | 10E<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)   | 10F<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR)<br>(Signal)   | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)   | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)   | 10J<br>(GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)  | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)   |  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)  | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)   | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)  | 10E<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)  | 10F<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)   | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)   | (GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)   |  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)  | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Bottom)   | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)  | 10E<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(Bottom)  | 10F<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(Bottom)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)  | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)  | 10J<br>(GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)  |  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)  | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Bottom)   | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)  | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (GND) (Bottom)  | 10F (Top) (GND) (Signal) (PWR) (Signal) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom)   | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)   | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)  | 10J<br>(GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)  | <u>12L</u>   |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)  | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Bottom)   | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)  | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom) 12E (Top)   | 10F (Top) (GND) (Signal) (PWR) (Signal) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom) 12F (Top)   | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)   | 10H<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)   | 10J<br>(GND)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)  | <u>12L</u><br>(GND)  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  Layer 1   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12A<br>(Top)<br>(GND)   | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12B<br>(Top)<br>(PWR)  | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Bottom)<br>12C<br>(Top)<br>(GND)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)   | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom) 12E (Top) (GND)  | 10F (Top) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom) 12F (Top) (GND)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)  | 10H (GND) (Signal) (Signal) (PWR) (Signal) (GND) (Signal) (GND) (Signal) (GND) 12H (Top) (PWR)   | (GND) (Signal) (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (Signal) (GND)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)  | <b>12L</b><br>(GND)<br>(PWR)   |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  Layer 1 Layer 2 Layer 3   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12A<br>(Top)<br>(GND)<br>(PWR)  | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12B<br>(Top)<br>(PWR)<br>(GND)  | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(Bottom)<br>12C<br>(Top)<br>(GND)<br>(Signal)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)  | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (GND) (Bottom)  12E (Top) (GND) (Signal)  | 10F (Top) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (GND) (Bottom) 12F (Top) (GND) (Signal)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)<br>(Signal)  | 10H (GND) (Signal) (Signal) (PWR) (Signal) (GND) (Signal) (GND) (Signal) (GND) 12H (Top) (PWR) (Signal)  | (GND) (Signal) (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (Signal) (GND)   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>T2K<br>(Top)<br>(GND)<br>(Signal)   | 12L<br>(GND)<br>(PWR)<br>(Signal)  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  Layer 1 Layer 2 Layer 3 Layer 4   | 10A<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(GND)<br>(Bottom)<br>12A<br>(Top)<br>(GND)<br>(PWR)<br>(Signal)  | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12B<br>(Top)<br>(PWR)<br>(GND)<br>(Signal)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Bottom)<br>12C<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)<br>(GND)   | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom)  12E (Top) (GND) (Signal) (GND) (Signal) (GND)   | 10F (Top) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (GND) (Bottom) 12F (Top) (GND) (Signal) (Signal) (Signal)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)  | 10H (GND) (Signal) (Signal) (PWR) (Signal) (GND) (Signal) (GND) (Top) (PWR) (Signal) (GND)   | (GND) (Signal) (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (END) (Signal) (GND) (Signal) (GND) (Signal) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (PWR)                      | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>12K<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)   | 12L<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)  |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  Layer 10  Layer 1 Layer 2 Layer 3 Layer 4 Layer 5                               | 10A (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (GND) (Bottom)  12A (Top) (GND) (PWR) (Signal) (Signal) (GND)   | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12B<br>(Top)<br>(PWR)<br>(GND)  | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(Bottom)<br>12C<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)   | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)                               | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom)  12E (Top) (GND) (Signal) (GND) (Signal) (COND) | 10F (Top) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom) 12F (Top) (GND) (Signal) (Signal) (GND) (Signal) (GND)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)  | 10H (GND) (Signal) (Signal) (PWR) (Signal) (GND) (Signal) (GND) 12H (Top) (PWR) (Signal) (GND)   | 10J (GND) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (GND) (Signal) (GND) (Signal) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (PWR) (GND)                        | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>12K<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)   | 12L<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)   |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6                                 | 10A (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (GND) (Bottom)  12A (Top) (GND) (PWR) (Signal) (Signal) (GND)   | 10B (Top) (GND) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (GND) (Bottom)  12B (Top) (PWR) (GND) (Signal) (COND) | 10C (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (PWR) (Bottom)  12C (Top) (GND) (Signal) (PWR) (GND) (Signal) (GND) (Signal) (GND)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)       | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom)  12E (Top) (GND) (Signal) (Signal) (FWR) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal)  | 10F (Top) (GND) (Signal) (PWR) (Signal) (Signal) (GND) (Bottom)  12F (Top) (GND) (Signal) (Signal) (GND) (Signal) (Signal) (Signal)   | 10G (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (GND) 12G (Top) (GND) (Signal) (Signal) (FWR) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal)   | 10H (GND) (Signal) (Signal) (Signal) (Signal) (GND) (Signal) (GND)  12H (Top) (PWR) (Signal) (Signal) (GND)  | (GND) (Signal) (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (END) (GND) (GND) (Signal)       | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>12K<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)   | 12L<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)                               |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7                         | 10A (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (GND) (Bottom)  12A (Top) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (PWR)   | 10B (Top) (GND) (Signal) (Signal) (PWR) (Signal) (Signal) (GND) (Bottom) 12B (Top) (PWR) (GND) (Signal) (GND) (Signal) (Signal) (Signal)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR)<br>(Bottom)<br>12C<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)          | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom)  12E (Top) (GND) (Signal) (GND) (Signal) (COND) | 10F (Top) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom) 12F (Top) (GND) (Signal) (Signal) (GND) (Signal) (GND)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)  | 10H (GND) (Signal) (Signal) (PWR) (Signal) (GND) (Signal) (GND) 12H (Top) (PWR) (Signal) (GND)   | 10J (GND) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (GND) (Signal) (GND) (Signal) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (PWR) (GND)                        | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)<br>12K<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)  | 12L<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)                   |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10  Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6                                 | 10A (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (GND) (Bottom)  12A (Top) (GND) (PWR) (Signal) (Signal) (GND)   | 10B (Top) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (GND) (Bottom)  12B (Top) (PWR) (GND) (Signal) (PWR) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (OND)  | 10C (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (PWR) (Bottom)  12C (Top) (GND) (Signal) (PWR) (GND) (Signal) (GND) (Signal) (GND)  | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)       | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom)  12E (Top) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal)  | 10F (Top) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom)  12F (Top) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal)  | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)   | 10H (GND) (Signal) (Signal) (Signal) (Signal) (GND) (Signal) (GND) (Signal) (GND) (Signal) (GND) (Signal) (GND) (Signal) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal)  | (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (Signal) (GND) (Signal)    | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>12K<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)   | 12L<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)                               |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 10  Layer 1 Layer 2 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8                 | 10A (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (GND) (Bottom)  12A (Top) (GND) (PWR) (Signal) (Signal) (COD) (PWR) (Signal) (COD) (PWR) (Signal) (COD) (PWR) (Signal) (COD) (PWR) (Signal)                         | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12B<br>(Top)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(Bottom)<br>12C<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)             | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)          | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom)  12E (Top) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (GND)  | 10F (Top) (GND) (Signal) (PWR) (Signal) (PWR) (Signal) (GND) (Bottom)  12F (Top) (GND) (Signal) (PWR)                               | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)                         | 10H (GND) (Signal) (Signal) (Signal) (Signal) (GND) (Signal) (GND) 12H (Top) (PWR) (Signal) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (GND) (Signal) (GND)   | 10J (GND) (Signal) (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND)  12J (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (PWR) (GND) (Signal) (PWR) (GND) (Signal) (Signal) (PWR) (GND) | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(EWR)<br>(GND)<br>12K<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal) | 12L<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(GND) |
| Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 10  Layer 1 Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 7 Layer 8 Layer 9 | 10A (Top) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (GND) (Bottom)  12A (Top) (GND) (PWR) (Signal) (Signal) (COD) (PWR) (Signal) (Signal) (COD) (PWR) (Signal) (COD) (PWR) (Signal) (Signal) (Signal) (Signal) (Signal) | 10B<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)<br>(Bottom)<br>12B<br>(Top)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)   | 10C<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(Bottom)<br>12C<br>(Top)<br>(GND)<br>(Signal)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR) | 10D<br>(Top)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(Bottom)<br>12D<br>(Top)<br>(GND)<br>(Signal)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR) | 10E (Top) (GND) (Signal) (PWR) (GND) (Signal) (PWR) (Signal) (GND) (Bottom)  12E (Top) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (GND) (Signal) (GND)   | 10F (Top) (GND) (Signal) (PWR) (Signal) (Signal) (PWR) (Signal) (GND) (Bottom)  12F (Top) (GND) (Signal) | 10G<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(GND)<br>12G<br>(Top)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal) | 10H (GND) (Signal) (Signal) (Signal) (Signal) (GND) (Signal) (GND) 12H (Top) (PWR) (Signal) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) | (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (GND) (Signal) (GND) (Signal) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (PWR) (GND) (Signal) (PWR)                   | 10K<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)<br>(EMD)<br>(EMD)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)  | 12L<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(GND)          |

## Note:

This document is used for the naming convention of the PADS Layout "Start Files", "CAM Files", "2D-Line Below Board Text" items and AutoCAD Lay-up Details.



## **PCB LAYER CONFIGURATION STACK-UPS**

Rev A

Layer Configurations.doc 1/24/2006 3:29:00 AM

|  | <u>14A</u>  | <u>14B</u>   | 14C   | 14D  | 14E      | <u>14F</u> | 14G      |  |
|--|---|--|---|--|----------|------------|----------|--|
| Layer 1  | (Top)   | (Top)  | (GND)   | (PWR)  | (Top)    | (Top)      | (Top)    |  |
| Layer 2  | (GND)   | (PWR)  | (Signal)  | (Signal)   | (GND)    | (PWR)      | (GND)    |  |
| Layer 3  | (Signal)  | (Signal)   | (PWR)   | (GND)  | (Signal) | (Signal)   | (PWR)    |  |
| Layer 4  | (Signal)  | (Signal)   | (GND)   | (PWR)  | (Signal) | (GND)      | (Signal) |  |
| Layer 5  | (PWR)   | (GND)  | (Signal)  | (Signal)   | (GND)    | (Signal)   | (Signal) |  |
| Layer 6  | (GND)   | (PWR)  | (Signal)  | (Signal)   | (Signal) | (Signal)   | (GND)    |  |
| Layer 7  | (Signal)  | (Signal)   | (PWR)   | (GND)  | (PWR)    | (PWR)      | (Signal) |  |
| Layer 8  | (Signal)  | (Signal)   | (GND)   | (PWR)  | (GND)    | (GND)      | (Signal) |  |
| Layer 9  | (PWR)   | (GND)  | (Signal)  | (Signal)   | (Signal) | (Signal)   | (GND)    |  |
| Layer 10   | (GND)   | (PWR)  | (Signal)  | (Signal)   | (PWR)    | (Signal)   | (Signal) |  |
| Layer 11   | (Signal)  | (Signal)   | (PWR)   | (GND)  | (Signaĺ) | (PWR)      | (Signal) |  |
| Layer 12   | (Signal)  | (Signal)   | (GND)   | (PWR)  | (Signal) | (Signal)   | (PWR)    |  |
| Layer 13   | (PWR)   | (GND)  | (Signal)  | (Signal)   | (GND)    | (GND)      | (GND)    |  |
| Layer 14   | (Bottom)  | (Bottom)   | (PWR)   | (GND)  | (Bottom) | (Bottom)   | (Bottom) |  |
|  | 16A   | <u>16B</u>   | <u>16C</u>  | 16D  |          |            |          |  |
| L assau 4  |   |  |   | (=14/=)  |          |            |          |  |
| Layer 1  | (Top)   | (Top)  | (GND)   | (PWR)  |          |            |          |  |
| Layer 1  | (Top)<br>(GND)  | (Top)<br>(PWR)   | (GND)<br>(Signal)   |  |          |            |          |  |
| Layer 2  |   |  | ` ,   | (PWR)<br>(Signal)<br>(GND)   |          |            |          |  |
| -  | (GND)   | (PWR)  | (Signal)  | (Signal)   |          |            |          |  |
| Layer 2<br>Layer 3   | (GND)<br>(PWR)  | (PWR)<br>(GND)   | (Signal)<br>(PWR)<br>(Signal)   | (Signal)<br>(GND)  |          |            |          |  |
| Layer 2<br>Layer 3<br>Layer 4  | (GND)<br>(PWR)<br>(Signal)  | (PWR)<br>(GND)<br>(Signal)   | (Signal)<br>(PWR)   | (Signal)<br>(GND)<br>(Signal)  |          |            |          |  |
| Layer 2<br>Layer 3<br>Layer 4<br>Layer 5   | (GND)<br>(PWR)<br>(Signal)<br>(Signal)  | (PWR)<br>(GND)<br>(Signal)<br>(Signal)   | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)   | (Signal)<br>(GND)<br>(Signal)<br>(Signal)  |          |            |          |  |
| Layer 2<br>Layer 3<br>Layer 4<br>Layer 5<br>Layer 6  | (GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)   | (PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)  | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)   | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)   |          |            |          |  |
| Layer 2<br>Layer 3<br>Layer 4<br>Layer 5<br>Layer 6<br>Layer 7   | (GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)  | (PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)   | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)  | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)  |          |            |          |  |
| Layer 2<br>Layer 3<br>Layer 4<br>Layer 5<br>Layer 6<br>Layer 7<br>Layer 8                                    | (GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)  | (PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)   | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)   | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)  |          |            |          |  |
| Layer 2<br>Layer 3<br>Layer 4<br>Layer 5<br>Layer 6<br>Layer 7<br>Layer 8<br>Layer 9                         | (GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)                            | (PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)   | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)   | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)  |          |            |          |  |
| Layer 2<br>Layer 3<br>Layer 4<br>Layer 5<br>Layer 6<br>Layer 7<br>Layer 8<br>Layer 9<br>Layer 10             | (GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)                   | (PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)  | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)  | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)   |          |            |          |  |
| Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10 Layer 11                            | (GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)                      | (PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)                                     | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)   | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)  |          |            |          |  |
| Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10 Layer 11 Layer 12                   | (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (GND) (PWR) (Signal) (GND) (PWR)                   | (PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)                                     | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)   | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)  |          |            |          |  |
| Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10 Layer 11 Layer 12 Layer 13          | (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (Signal)       | (PWR) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (GND) (Signal) (Signal)                               | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(Signal)                         | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR)<br>(Signal)<br>(PWR)    |          |            |          |  |
| Layer 2 Layer 3 Layer 4 Layer 5 Layer 6 Layer 7 Layer 8 Layer 9 Layer 10 Layer 11 Layer 12 Layer 13 Layer 14 | (GND) (PWR) (Signal) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (GND) (PWR) (Signal) (Signal) (GND) | (PWR) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (PWR) (GND) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) (Signal) | (Signal)<br>(PWR)<br>(Signal)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(GND)<br>(PWR)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal) | (Signal)<br>(GND)<br>(Signal)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(PWR)<br>(GND)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(Signal)<br>(PWR) |          |            |          |  |

## Notes:

- 1. Stack-ups with GND & PWR on outer layers are primarily meant for fanout and short trace runs only. For HDI purposes, the second layer is a signal layer to run traces from fine pitch BGA's. In this HDI application, the manufacturer would use laser drills to perform a control depth drilling process to access layer 2.
- 2. Balance of laminate thickness between layers from the centerline of the PCB structure is required for all stack-ups in order to minimize or eliminate warpage. You must determine laminate type and thickness prior to the start of CAD layout.
- 3. It is imperative that analysis of the stack-up be done with the manufacturer to determine copper weights, prepreg and core thickness before CAD layout to insure controlled impedance.
- 4. 1.6mm FR4 material can be used for Stack-ups 2 16 Layers. 1.8mm FR4 is used for the 10 20 Layer, 2.3mm FR4 is used for the 10 32 Layer stack-ups.
- 5. Common PC Board thickness' are:
  - A. 0.8mm (.031")
  - B. 1.0mm (.040")
  - C. 1.6mm (.062")
  - D. 1.8mm (.070")
  - E. 2.3mm (.090")
  - F. 3.2mm (.125")