

| #  | Layer          | Thickness | Description                                       | Dk  | Df    | Note                        |
|----|----------------|-----------|---|-----|-------|-----------------------------|
|    | Top Solder     | 0.015mm   | Soldermask IPC-SM840                              | 3,5 | 0,028 | used on rigid parts         |
| 1  | Top Side       | 0.030mm   | Starting foil 1/4oz. after plating and processing |     |       |                             |
|    |                | 0.065mm   | Prepreg IPC-4101/127/128                          | 3,5 | 0,011 | FR-4.1 filled, halogen free |
| 2  | Inner Layer 1  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.150mm   | Core IPC-4101/127/128                             | 4,3 | 0,011 | FR-4.1 filled, halogen free |
| 3  | Inner Layer 2  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.125mm   | Prepreg IPC-4101/127/128                          | 3,7 | 0,011 | FR-4.1 filled, halogen free |
| 4  | Inner Layer 3  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.150mm   | Core IPC-4101/127/128                             | 4,3 | 0,011 | FR-4.1 filled, halogen free |
| 5  | Inner Layer 4  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.125mm   | Prepreg IPC-4101/127/128                          | 3,7 | 0,011 | FR-4.1 filled, halogen free |
| 6  | Inner Layer 5  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.150mm   | Core IPC-4101/127/128                             | 4,3 | 0,011 | FR-4.1 filled, halogen free |
| 7  | Inner Layer 6  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.125mm   | Prepreg IPC-4101/127/128                          | 3,7 | 0,011 | FR-4.1 filled, halogen free |
| 8  | Inner Layer 7  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.150mm   | Core IPC-4101/127/128                             | 4,3 | 0,011 | FR-4.1 filled, halogen free |
| 9  | Inner Layer 8  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.125mm   | Prepreg IPC-4101/127/128                          | 3,7 | 0,011 | FR-4.1 filled, halogen free |
| 10 | Inner Layer 9  | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.150mm   | Core IPC-4101/127/128                             | 4,3 | 0,011 | FR-4.1 filled, halogen free |
| 11 | Inner Layer 10 | 0.017mm   | ED Base Copper                                    |     |       |                             |
|    |                | 0.065mm   | Prepreg IPC-4101/127/128                          | 3,5 | 0,011 | FR-4.1 filled, halogen free |
| 12 | Bottom Side    | 0.030mm   | Starting foil 1/4oz. after plating and processing |     |       |                             |
|    | Bottom Solder  | 0.015mm   | Soldermask IPC-SM840                              | 3,5 | 0,028 | used on rigid parts         |

**Total thickness: 1.640mm**

notes:

Final copper thickness according to IPC-6012

Please regard to our sectional design rules:  
▶ [www.we-online.com](http://www.we-online.com)

|  |  |          |               |
|--|--|----------|---------------|
| <b>HDI12_1-10-1_1,64_17_V2.12</b>  |  |          |               |
| PCB Thickness Tolerance: ± 10%   |  |          |               |
| customer   |  | created  |               |
| pcb name   |  | approved |               |
| engineer   |  | format   | A4, landscape |
| date   |  |          |               |
| Template Revision: 02/2021 by Andreas Schilpp / Michael Kress / Werner Öchslen |  |          |               |

