Orange - Standard layer names

**Paste, Silk, Mask and Copper** - Cu Layers names must have two digits on the name (except outer layers)

|  |  |  |
| --- | --- | --- |
| Type | Name format | Examples |
| Solder paste top side | *fixed\_name* | **pastec** |
| Solder paste bottom side | *fixed\_name* | **pastes** |
| Legend top side | *fixed\_name* | **silkc** |
| Legend bottom side | *fixed\_name* | **silks** |
| Solder mask top side | *fixed\_name* | **maskc** |
| Solder mask bottom side | *fixed\_name* | **masks** |
| Copper top (component) | *fixed\_name* | **comp** |
| Copper bottom (solder) | *fixed\_name* | **sold** |
| Inner layer signal positive | **##sp** | **02sp | 03sp | 10sp | 12sp** |
| Inner layer signal negative | **##sn** | **02sn | 03sn | 10sn | 12sn** |
| Inner layer mixed positive | **##mp** | **03mp | 04mp | 11mp | 14mp** |
| Inner layer mixed negative | **##mn** | **03mn | 04mn | 11mn | 14mn** |
| Inner layer plane positive | **##pp** | **02pp | 06pp | 12pp | 16pp** |
| Inner layer plane negative | **##pn** | **02pn | 06pn | 12pn | 16pn** |

**Special Layers** - Special Layers assigned to a Cu layer; keep two digits on the name

|  |  |  |
| --- | --- | --- |
| Type | Name format | Examples |
| Blank Inner layer | **##\_blank\_il** | **08\_blank\_il | 03\_blank\_il** |
| Blank Etched Core | **##\_blank\_*side*** | **04\_blank\_top | 03\_blank\_bot** |
| Blank Sub | **##\_blank\_?** | **01\_blank\_a | 08\_blank\_b** |
|  |  |  |
| Laser Sub | **##\_laser\_?** | **01\_laser\_a | 19\_laser\_a** |
| Plated Sub | **##\_plate\_?** | **01\_plate\_a | 06\_plate\_a** |
| Epoxy Sub | **##\_epoxy\_?** | **02\_epoxy\_a | 06\_epoxy\_b** |
| Pre Sub | **##\_pre\_?** | **01\_pre\_a | 04\_pre\_a** |
| Dot Sub | **##\_dot\_?** | **01\_dot\_a | 08\_dot\_b** |
| Protect Sub | **##\_protect\_?** | **06\_protect\_a | 10\_protect\_b** |
| Barrel Sub | **##\_barrel\_?** | **01\_barrel\_a | 13\_barrel\_b** |
|  |  |  |
| Laser Main | **##\_laser\_m** | **01\_laser\_m | 08\_laser\_m** |
| Plated Main | **##\_plate\_m** | **01\_plated\_m | 06\_plate\_m** |
| Epoxy Main | **##\_epoxy\_m** | **01\_epoxy\_m | 08\_epoxy\_m** |
| Pre Main | **##\_pre\_m** | **01\_pre\_m | 18\_pre\_m** |
| Dot Main | **##\_dot\_m** | **01\_dot\_m | 22\_dot\_m** |
| Protect Main | **##\_protect\_m** | **01\_protect\_m | 10\_protect\_m** |
|  |  |  |
| Via Plug | **##\_vplug\_m** | **01\_vplug\_m | 10\_vplug\_m** |
| Via Print | **##\_vprint\_m** | **01\_vprint\_m | 12\_vprint\_m** |
| Window | **##\_window\_m** | **01\_window\_m | 08\_window\_m** |

05\_resist\_il / 01\_resist\_m / 01\_peelable\_m / 03\_punch\_top

|  |  |  |
| --- | --- | --- |
| Type | Name format | Examples |
| Customer outline | *fixed\_name* | **outline** |
| Summit ref- outline | *fixed\_name* | **summit\_ref** |

**Drill** - Drill layers and id have a start and stop layer, ***name\_from-to*** (Do not add leading zero; Do not add abc after the range)  
 **?** = character ‘**a**’, ’**b** ’, ’**c**’… **#** = numeric ‘**1**‘, ‘**2**‘, ‘**3**‘… ***job*** = tool number ***N*** = number of Cu layers

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Genesis layers Names | |  | Names for NC output files | | | |
|  | Type | Format | Examples |  | Offset | No Offset | Scale+Offset | Scale |
| ID | IntelliDrill program | *fixed\_name* | **id** | = | N/A | ***job*.id** | N/A | N/A |
| IntelliDrill program sub-lam | **?.id\_#-#** | **a.id\_3-20** | **b.id\_2-20** | = | N/A | ***job*?.id** | N/A | N/A |
|  |  |  |  |  |  |  |  |  |
| Mechanical | Final drill | *fixed\_name* | **drill** | ! | ***job*.dc** | ***job*.d** | ***job*sc.dc** | ***job*sc.d** |
| Epoxy drill ( Thru hole ) | *fixed\_name* | **epoxy** | ! | ***job*dc.ed** | ***job*.ed** | ***job*scdc.ed** | ***job*sc.ed** |
| Sub lam drill /epoxy | **via\_#-#** | **via\_1-4** | **via\_5-8** | ! | ***job*?.dc** | ***job*?.d** | ***job*sc?.dc** | ***job*sc?.d** |
| via plated shut | *fixed\_name* | **ps** | ! | ***job*dc.ps** | ***job*.ps** | ***job*scdc.ps** | ***job*sc.ps** |
| Sub via plated shut | **ps\_#-#** | **ps\_1-4** | **ps\_4-6** | ! | ***job*?dc.ps** | ***job*?.ps** | ***job*sc?dc.ps** | ***job*sc?.ps** |
| Second stage | *fixed\_name* | **ss** | = | N/A | ***job*.ss** | N/A | ***job*sc.ss** |
| Registration / Tooling Hole | *fixed\_name* | **dc.rg** | = | ***job*dc.rg** | ***job*.rg** | ***job*scdc.rg** | ***job*sc.rg** |
| Registration sub-lam | **?dc.rg\_#-#** | **adc.rg\_#-#**|**bdc.rg\_#-#** | = | ***job*?dc.rg** | ***job*?.rg** | ***job*sc?dc.rg** | ***job*sc?.rg** |
| Core Registration for Laser | *fixed\_name* | **th** | = | N/A | ***job*.th** | N/A | N/A |
|  |  |  |  |  |  |  |  |  |
|  | Optical drill top | *fixed\_name* | **opd** | = | N/A | ***job*.opd** | N/A | N/A |
| Optical drill bottom | *fixed\_name* | **opd7** | = | N/A | ***job*.opd7** | N/A | N/A |
|  |  |  |  |  |  |  |  |  |
| Laser | Ormet | **ormet\_#*-*#** | **ormet\_24-25** |  | N/A | ***job*.orm#** | N/A | N/A |
| Laser drill top | **lsr\_1*-#*** | **lsr\_1-2** | **lsr\_1-3** | ! | N/A | ***job*.td1** | N/A | N/A |
| Laser drill bottom | **lsr\_*(N-1)*-*N*** | **lsr\_7-8** | **lsr\_9-10** | ! | N/A | ***job*.bd7** | N/A | N/A |
| Laser drill sub-lam top | **lsr\_#*-(#+1)*** | **lsr\_2-3** | **lsr\_3-4** | ! | N/A | ***job*?.td1** | N/A | N/A |
| Laser drill sub-lam bottom | **lsr\_#*-(#+1)*** | **lsr\_17-18** | **lsr\_18-19** | ! | N/A | ***job*?.bd7** | N/A | N/A |
|  |  |  |  |  |  |  |  |  |
| Control Depth | Control depth top | **cd1\_1-#** | **cd1\_1-7** | **cd1\_1-3** | = | N/A | ***job*.cd1** | N/A | ***job*sc.cd1** |
| Control depth bottom | **cd7\_N-#** | **cd7\_6-4** | **cd7\_26-15** | = | N/A | ***job*.cd7** | N/A | ***job*sc.cd7** |
| Control depth top(Additional) | **?.cd1\_#-#** | **a.cd1\_1-7** | **b.cd1\_1-3** | = | N/A | ***job*?.cd1** | N/A | ***job*sc?.cd1** |
| Control depth bot(Additional) | **?.cd7\_#-#** | **b.cd7\_6-4** | **b.cd7\_8-6** | = | N/A | ***job*?.cd7** | N/A | ***job*sc?.cd7** |
|  |  |  |  |  |  |  |  |  |
| Back Drill | Back drill top | **bd1\_1-#** | **bd1\_1-7** | **bd1\_1-3** | = | N/A | ***job*.bd1** | N/A | ***job*sc.bd1** |
| Back drill bottom | **bd7\_N-#** | **bd7\_6-4** | **bd7\_26-15** | = | N/A | ***job*.bd7** | N/A | ***job*sc.bd7** |
| Back drill top(Additional) | **?.bd1\_#-#** | **a.bd1\_1-7** | **b.bd1\_1-3** | = | N/A | ***job*?.bd1** | N/A | ***job*sc?.bd1** |
| Back drill bot(Additional) | **?.bd7\_#-#** | **b.bd7\_6-4** | **b.bd7\_8-6** | = | N/A | ***job*?.bd7** | N/A | ***job*sc?.bd7** |

**Rout** - Rout layers do not need range on the name, partial rout stops on a depth not on a Cu layer number, use **\_** instead of **-**   
 **?** = character ‘**a**’, ’**b** ’, ’**c**’… **#** = numeric ‘**1**‘, ‘**2**‘, ‘**3**‘… ***job*** = tool number   
 vision(panel) = ***job\**.*v*\*** vision multi-zone(working) = ***job\*mz*.*v*\*** scaled = ***job\*sc*.\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Genesis layers Names | | Names for NC output files |
|  | Type | Format | Examples | All in verision 1 | t = top(no mirror) | v = bottom(mirror) |
| Cut Through | Standard Rout | *fixed\_name* | **rout** | ***job*.rt** | ***job*.rb**| ***job*.vrt**| ***job*.vrb**| ***jobmz*.vrt** |
| Special Rout / Break Tips | **rout#** | **rout1** | **rout2** | **rout3** | ***job*.rt#**|***job*.rb#**|***job*.vrt#**|***job*.vrb#**|***jobmz*.vrt#** |
|  |  |  |  |
| Laser Rout | *fixed\_name* | **r1** | ***job*.r1** |
| Laser Rout(Additional) | **rd#** | **r2** | **r3** | **r4** | **r5** | ***job*.r#** |
|  |  |  |  |  |
| Cuts with Depth | Milling top | *fixed\_name* | **mlt** | ***job*.mlt** | ***job*.vmlt** | ***jobmz*.vmlt** |
| Milling bottom | *fixed\_name* | **mlb** | ***job*.mlb** | ***job*.vmlb** | ***jobmz*.vmlb** |
|  |  |  |  |
| Bevel top | *fixed\_name* | **bevel\_top** | ***job*.bvt** | ***job*.vbvt** | ***jobmz*.vbvt** |
| Bevel bottom | *fixed\_name* | **bevel\_bot** | ***job*.bvb** | ***job*.vbvb** | ***jobmz*.vbvb** |
|  |  |  |  |
| Scoring top | *fixed\_name* | **scoring\_top** | ***job*.sct** | ***job*.vsct** | ***jobmz*.vsct** |
| Scoring bottom | *fixed\_name* | **scoring\_bot** | ***job*.scb** | ***job*.vscb** | ***jobmz*.vscb** |
|  |  |  |  |  |
| Holes with Depth | C-Bore top | **cbt#w\_#d** | **cbt\_112w\_30d**|**cbt\_125w\_10d** | ***job*.cbt** | ***job*.vcbt** | ***jobmz*.vcbt** |
| C-Bore bottom | **cbb#w\_#d** | **cbb\_112w\_30d**|**cbb\_100w\_40d** | ***job*.cbb** | ***job*.vcbb** | ***jobmz*.vcbb** |
| C-Bore top (Additional) | **?.cbt#w\_#d** | **a.cbt\_112w\_30d**  **b.cbt\_125w\_10d** | ***job*?.cbt** | ***job*?.vcbt** | ***job*?*mz*.vcbt** |
| C-Bore bot (Additional) | **?.cbb#w\_#d** | **a.cbb\_112w\_30d**  **b.cbb\_100w\_40d** | ***job*?.cbb** | ***job*?.vcbb** | ***job*?*mz*.vcbb** |
|  |  |  |  |  |
| Holes with Depth | C-Sink top | **cst#w\_#d** | **cst\_112w\_30d**|**cst\_125w\_10d** | ***job*.cst** | ***job*.vcst** | ***jobmz*.vcst** |
| C-Sink bottom | **csb#w\_#d** | **csb\_112w\_30d**|**csb\_100w\_40d** | ***job*.csb** | ***job*.vcsb** | ***jobmz*.vcsb** |
| C-Sink top (Additional) | **?.cst#w\_#d** | **a.cst\_112w\_30d**  **b.cst\_125w\_10d** | ***job*?.cst** | ***job*?.vcst** | ***job*?*mz*.vcst** |
| C-Sink bot (Additional) | **?.csb#w\_#d** | **a.csb\_112w\_30d**  **b.csb\_100w\_40d** | ***job*?.csb** | ***job*?.vcsb** | ***job*?*mz*.vcsb** |