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1/31/2018 Program & PCB Name: NanoPower P80 PDU400 С Part NUmber: 100696-1 E Revision: 1.0 Brian Gasberg Thomsen PCB Designer: K **PCB Specifications:** Е D IPC-A-6012 cl. 3 **Base Specification:** Material: FR4 High Density Interconnect (1+n+1) Construction: N Layer count: Stackup detailes: See Stack-up sheet Special processes: **Notation Top** \checkmark **Notation Bottom** White low-outgassing epoxy Nickel/Hard Gold edge plating: See Gold plated mechanical layer in files included below. All drilled vias Vias in pad has to be filled and capped **V** All Microvia has to be with copper filling. Unless otherwise agreed **√** Surface finish: HASL **4** Nickel/Hard gold contacts: See Gold plated mechanical layer in files included below. **√** Panelization Use Gomspace standard cluster template - Cluster 1 П Minimum isolation distance: 100um Countersunk holes All 2.5 mm holes countersunk by 90 degrees to 5.5mm opening from the **4** PCB manufacturer logo - Not allowed unless otherwise agreed **√** Stencil data required Stencil data must be based on compensated production files 4 Electrically test to be done. Peelable Solder Mask: Impedance controlled nets Files included in data package File Description Format File Name Comments $\overline{}$ Read-Me File ReadMe.pdf ACROBAT This Documen 1 Top Hard Gold P80-PMU GM6 GERBER Hard Gold **V** Bottom Hard Gold P80-PMU.GM7 GERBER Hard Gold **√** mechanical 5 P80-PMU.GM5 GERBER Notation top 7 Top Paste P80-PMU.GTP GERBER Top Pastemask **V** Outline (Mechanical 4) P80-PMU.GM4 GERBER **Board Outline** Top Layer P80-PMU.GTL GERBER L1 in stackup via in pad only **4** mid1 P80-PMU.G1 GERBER **V** mid2 P80-PMU.G2 GERBER **√** P80-PMU.G3 GERBER mid3 **4** mid4 P80-PMU.G4 GERBER ✓ mid5 P80-PMU.G5 GERBER ✓ ✓ P80-PMU.G6 GERBER mid6 P80-PMU.G7 GERBER **4** mid8 P80-PMU.G8 GERBER 1 mid9 P80-PMU G7 GERBER **V** mid10 P80-PMU.G8 GERBER Bottom **√** P80-PMU.GBL GERBER L12 in stackup via in pad only $\overline{\checkmark}$ Bottom Paste P80-PMU.GBP GERBER Bottom Pastemask J NC Drill Report PDU-400.DRR ASCII NC Drill Report File NC Drill Plated Holes PDU-400-RoundHoles-Plated.TXT ASCII **√** NC Drill Non Plated Holes PDU-400-RoundHoles-NonPlated.TXT 7 NC Drill Plated Slots PDU-400-SlotHoles-Plated.TXT **ASCII** 7 Laser drill. Top Laver to Mid-Laver 1 PDU-400-RoundHoles-Plated.TX1 ASCII 7 NC Drill Plated, Mid-Layer 1 to Mid-Layer 10 PDU-400-RoundHoles-Plated.TX2 ASCII J Laser drill, Mid-Layer 10 to Bottom Layer PDU-400-RoundHoles-Plated.TX3 ASCII PDU-400_ODB.zip **√** ODB++ ODB Netlist etc. Stackup details Stack-up.pdf ACROBAT Cluster spec Cluster-1.pdf ACROBAT

All files are in millimeters and showed from top view.

Format: 4:4

Any changes/production optimizations must be approved by GomSpace.