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Date: Program & PCB Name: NanoPower BP8 Heater Part Number: 102477 Н Revision: E C K E PCB Designer: Mogens Groth Nicolaisen **PCB Specifications:** D IPC-6013-D class 2+ (Class 3 regarding requirements for Annular ring breakout, Surface and copper Base Specification: plating, and Copper wrap plating) Material: Flexible Metal-Clad Dielectrics IPC-4204A Dupont Pyralux Construction: Two layer flex Layer count: Stackup detailes: Tolerances: Thickness: +/- 10%, Outline: +/- 10%, Cluster dimensions: +/- 10% Special requirements: **Notation Top** White low-outgassing epoxy 1 **Notation Bottom** White low-outgassing epoxy See Gold plated mechanical layer in files included below. Nickel/Hard Gold edge plating: Vias in pad has to be filled and capped  $\Box$ All drilled vias All Microvia has to be with copper filling. Unless otherwise agreed 1 Hot Oil reflow SnPb - unless otherwise agreed Surface finish: See Gold plated mechanical layer in files included below. Nickel/Hard gold contacts: Use Gomspace standard cluster template - Choose Cluster 1 or Cluster 2 Panelization Minimum isolation distance: 200um Countersunk holes All 2.5 mm holes countersunk by 90 degrees to 5.5mm opening from the buttom layer. 4 PCB manufacturer logo - Not allowed unless otherwise agreed 1 PCB Manufacturer serial number See specified area in mechanical layer 7 Stencil data shall be based on compensated production files Stencil data required In accordance with IPC-9552, test level B Electrically test to be done. Peelable Solder Mask: Impedance controlled nets Top layer 150 ohm +/- 3% 4 Tolerances Thickness: +/- 10%, Outline: +/- 10%, Cluster dimensions: +/- 10% Files included in data package File Description File Name Format Comments 4 Read-Me File ReadMe.pdf ACROBAT This Document 4 Outline (Mechanical 4) Flex\_heater\_default.GM4 Gerber **Board Outline** 4 CID+LOGO (Mechanical 6) Flex\_heater\_default.GM6 Gerber Notation Top - white low-outgassing epoxy 4 Top Paste Flex heater default.GTP Gerber Top Paste 4 Top cover layer Flex\_heater\_default.GCT2 Gerber 1 Top side flex Flex\_heater\_default.GTL L1 in stackup Gerber 4 Bottom side flex Flex\_heater\_default.GBL Gerber L2 in stackup Bottom cover layer Flex\_heater\_default.GCB2 Gerber Bottom Coverlay 4 Stackup details ACROBAT Stack-up.pdf 1 ID-text (Mechanical 7) Flex\_heater\_default.GM7 Gerber Manufacturer serial no. notation Bottom - white low-outgassing epoxy 

All files are in millimeters and showed from top view.

Format: 4:3

Any changes/production optimizations shall be approved by GomSpace.