onsemi™

NCP3237 standard product

ON Semiconductor®

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Title EVAL BOARD - NCP3237		
Size	Document Number ONS	Rev C
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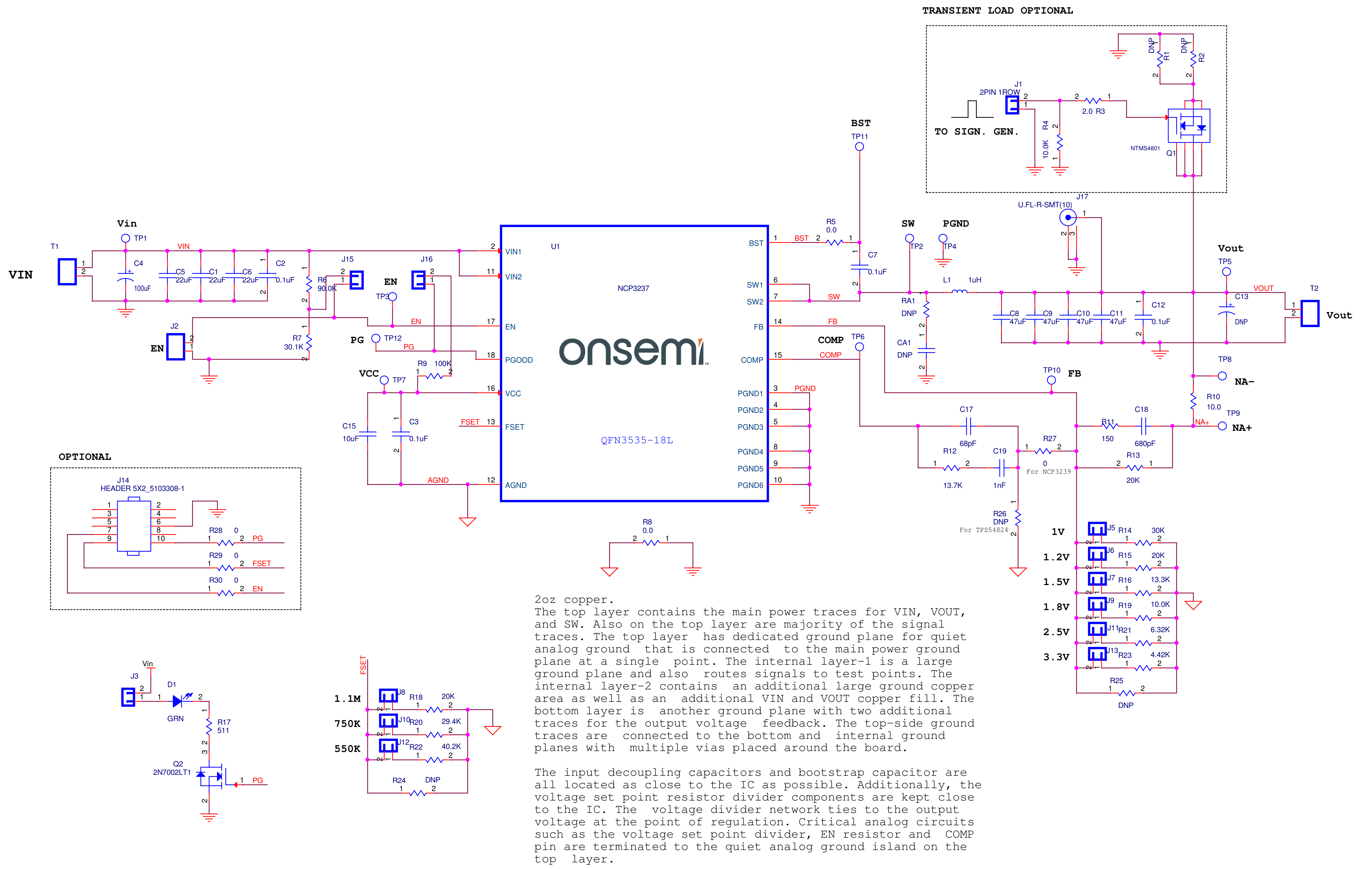

2oz copper.
The top layer contains the main power traces for VIN, VOUT, and SW. Also on the top layer are majority of the signal traces. The top layer has dedicated ground plane for quiet analog ground that is connected to the main power ground plane at a single point. The internal layer-1 is a large ground plane and also routes signals to test points. The internal layer-2 contains an additional large ground copper area as well as an additional VIN and VOUT copper fill. The bottom layer is another ground plane with two additional traces for the output voltage feedback. The top-side ground traces are connected to the bottom and internal ground planes with multiple vias placed around the board.

The input decoupling capacitors and bootstrap capacitor are all located as close to the IC as possible. Additionally, the voltage set point resistor divider components are kept close to the IC. The voltage divider network ties to the output voltage at the point of regulation. Critical analog circuits such as the voltage set point divider, EN resistor and COMP pin are terminated to the quiet analog ground island on the top layer.

Title
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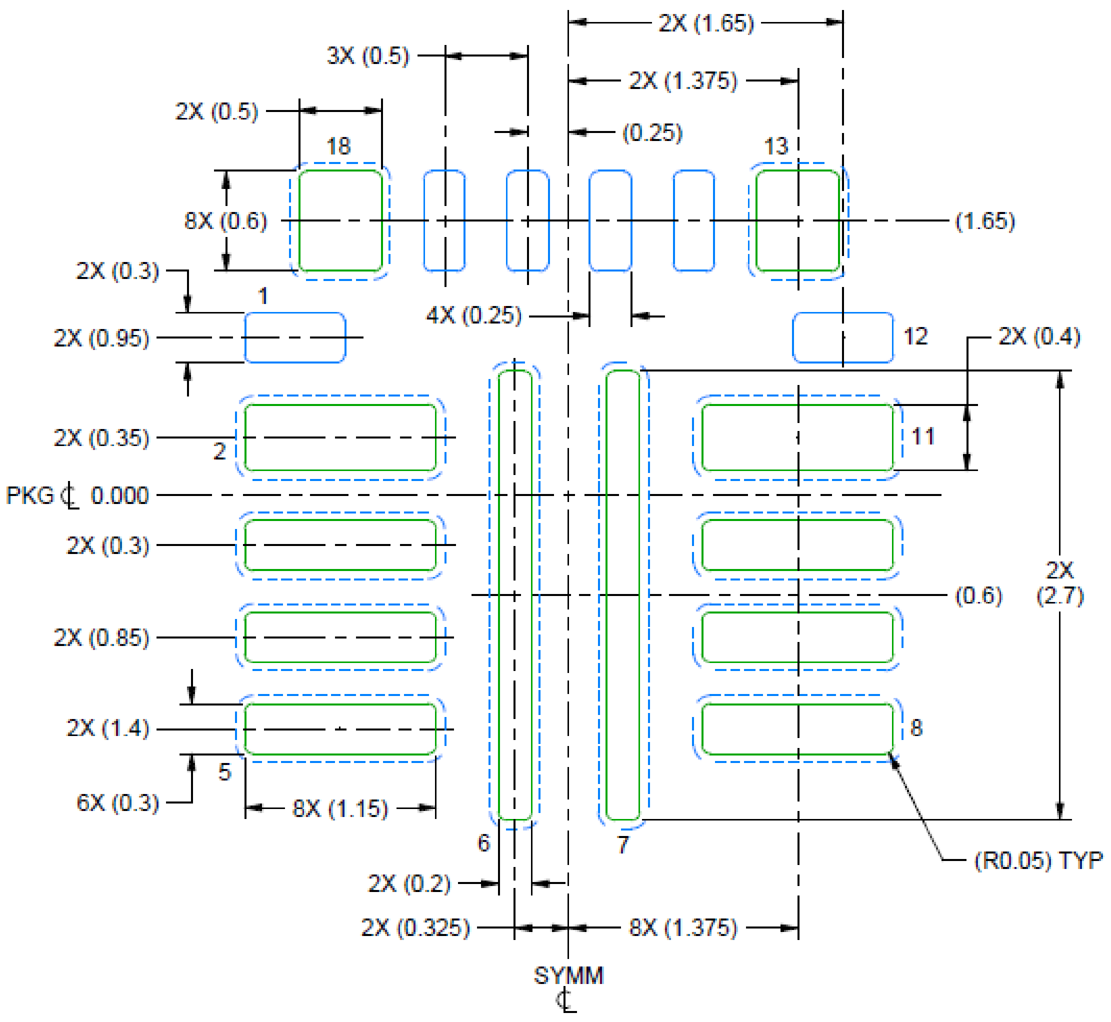
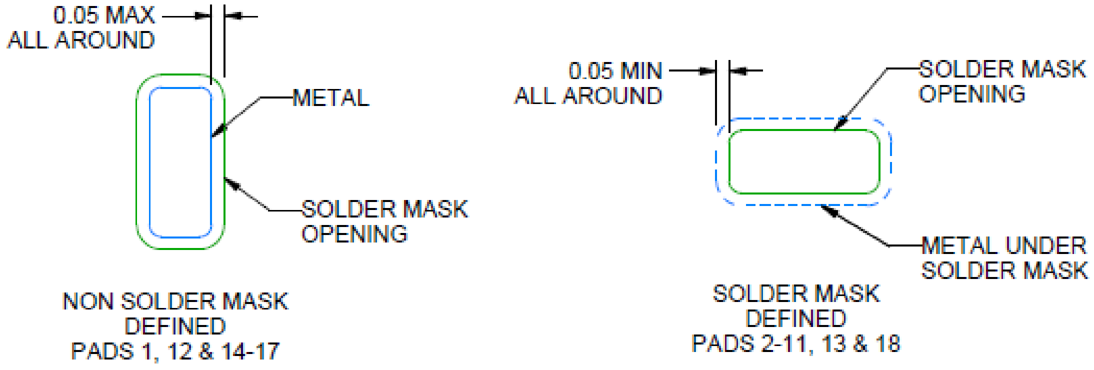


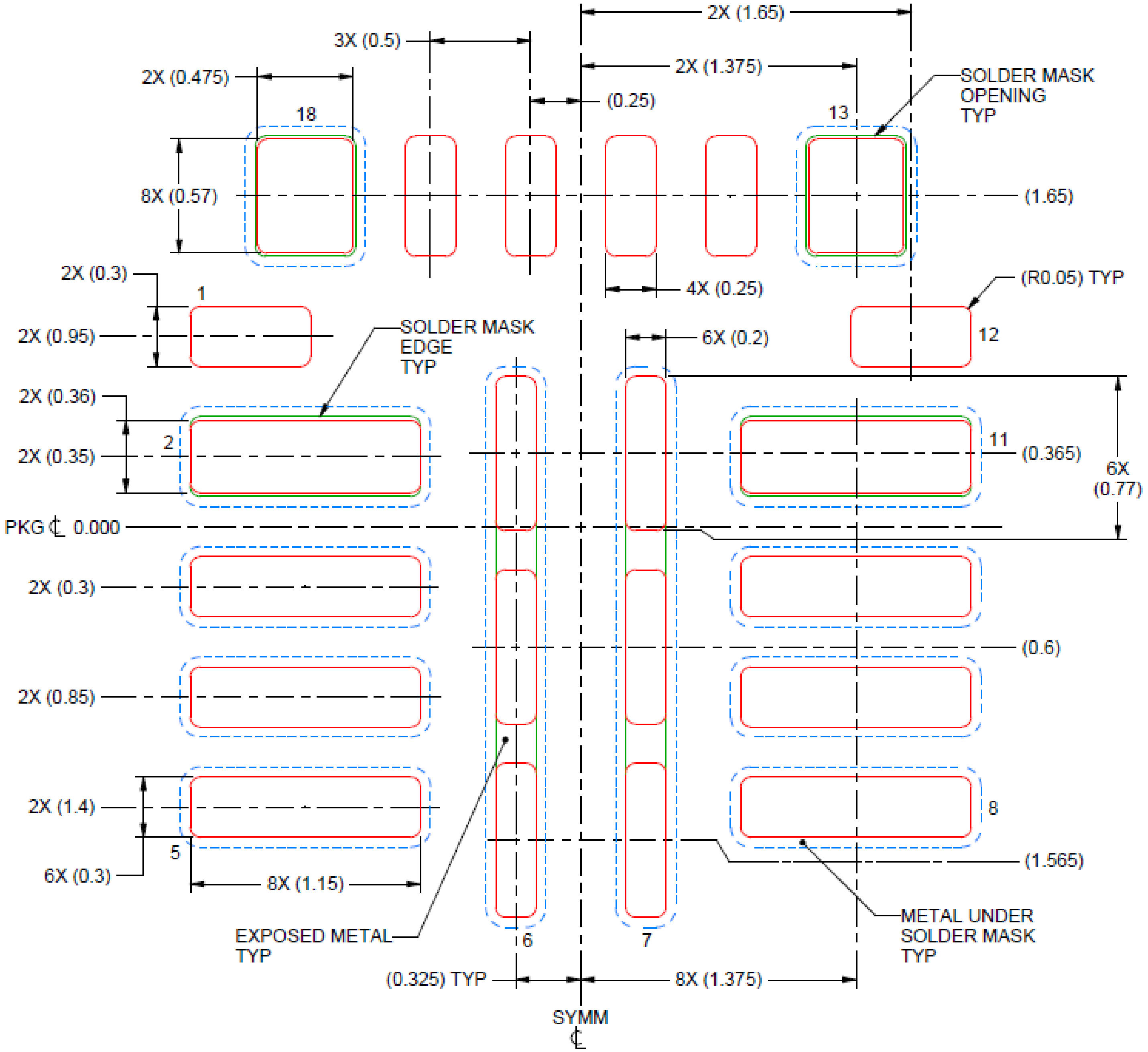
LAND PATTERN EXAMPLE
SCALE:20X



NON SOLDER MASK
DEFINED
PADS 1, 12 & 14-17

SOLDER MASK
DEFINED
PADS 2-11, 13 & 18

SOLDER MASK DETAILS



SOLDER PASTE EXAMPLE
BASED ON 0.1 mm THICK STENCIL

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