

Instructions for wire bonding STONYMAN chip to ARDUEYE PCB

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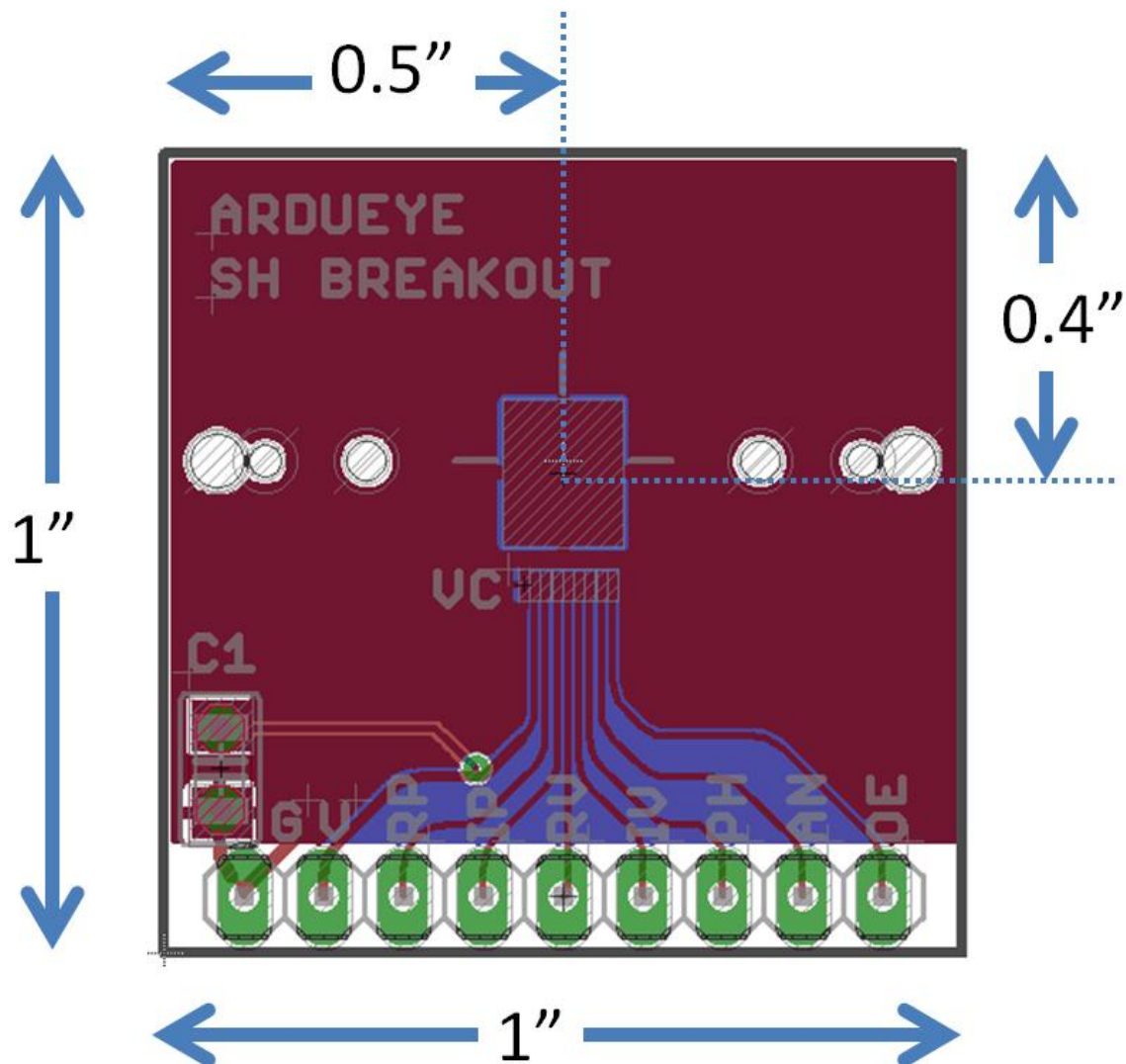
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Request:

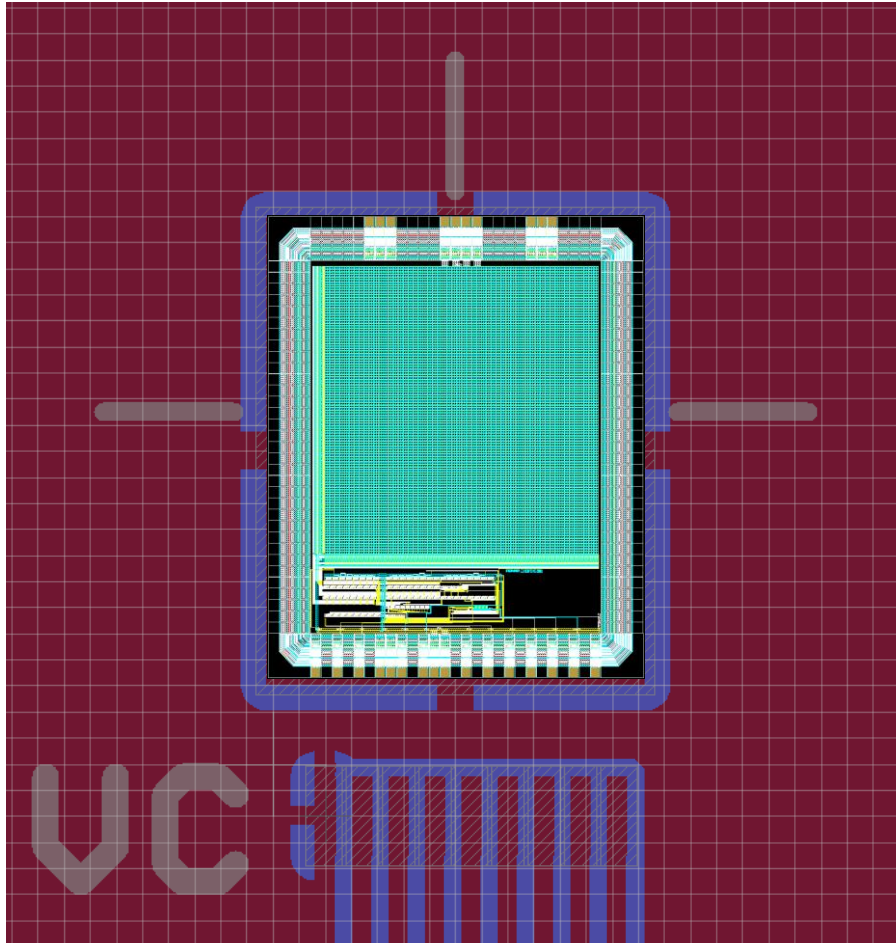
- 1) Mount STONYMAN chip on rigid PCB
- 2) Wire bond STONYMAN chip to PCB using Chip On Board (COB) techniques. Nine (9) wire bonds are required per chip
- 3) Encapsulate wire bonds only (see notes below).
- 4) Please inform us of standard lead time.
- 5) We will ship you the PCBs panelized and V-scored.
- 6) We will ship you the STONYMAN chips in Waffle Pack

Mounting the STONYMAN chip:

The picture below shows the PCB. The STONYMAN and the mounting location of the STONYMAN chip (labeled VC). Center of STONYMAN chip is centered horizontally. Center of STONYMAN chip is 0.4" from the top of the PCB

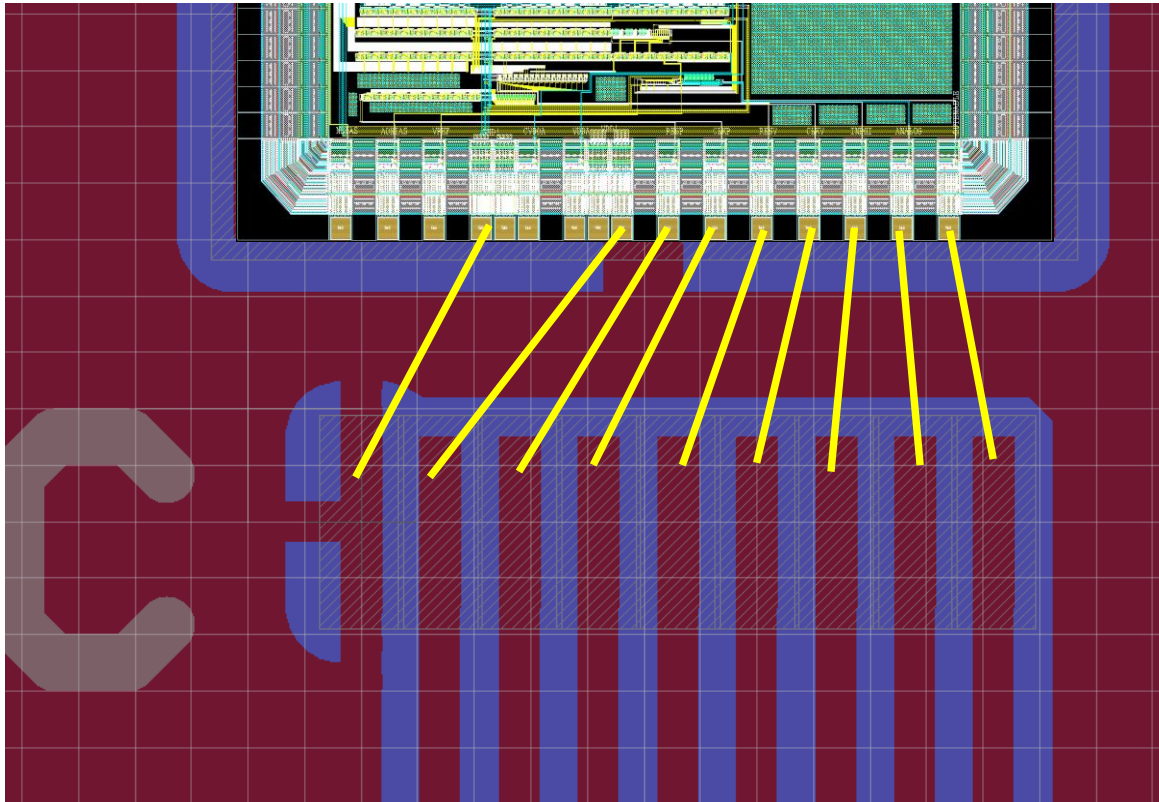


The picture below shows a rendering of the STONYMAN chip mounted on the bonding pad



Wire bonding diagram:

The wire bonding diagram is below. Only nine (9) wire bonds are needed.

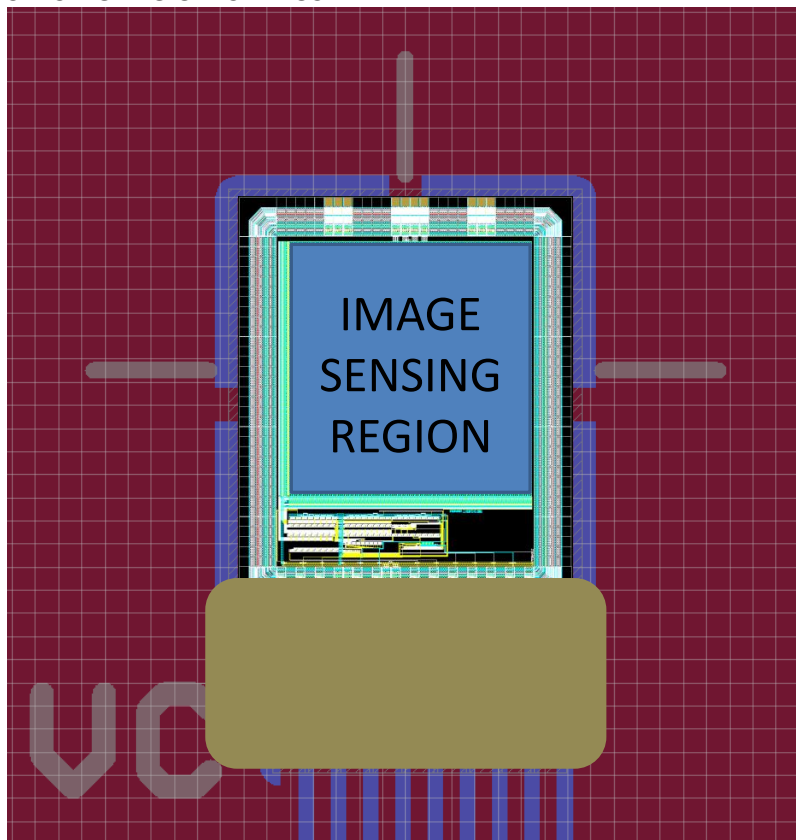


Encapsulation / “Glop”

IMPORTANT!!!! The STONYMAN chip is an image sensor / camera chip. It is required that the image sensing region of the chip NOT be covered. **ONLY ENCAPSULATE THE WIRE BONDS. DO NOT ENCAPSULATE THE ENTIRE CHIP!!!**

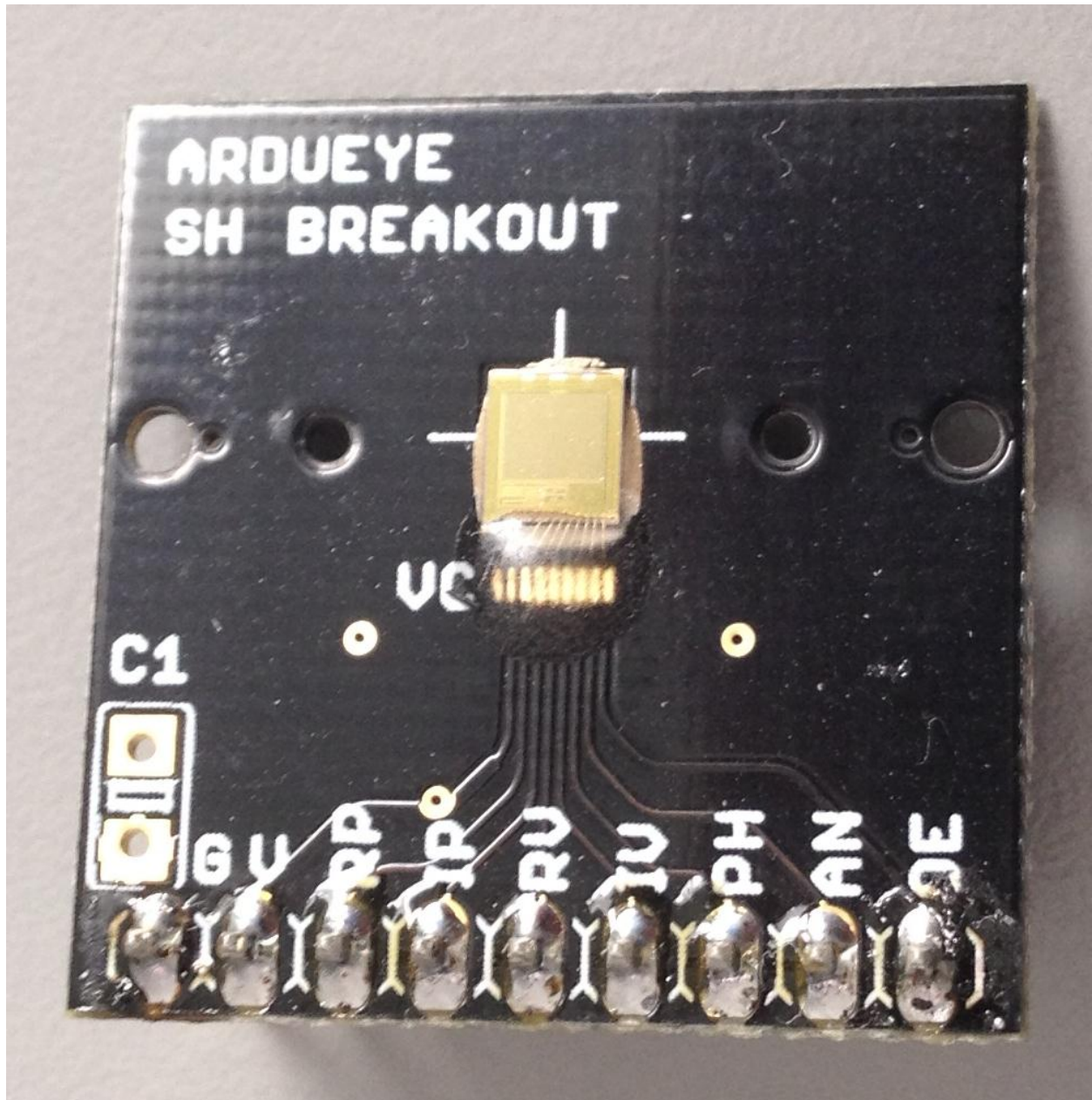
Encapsulant can be opaque or clear. Clear is preferred but not required. Encapsulant should be RIGID when cured.

CORRECT ENCAPSULATION SHOWN BELOW: ONLY WIRE BONDS ARE ENCAPSULATED AND IMAGE SENSING REGION IS EXPOSED

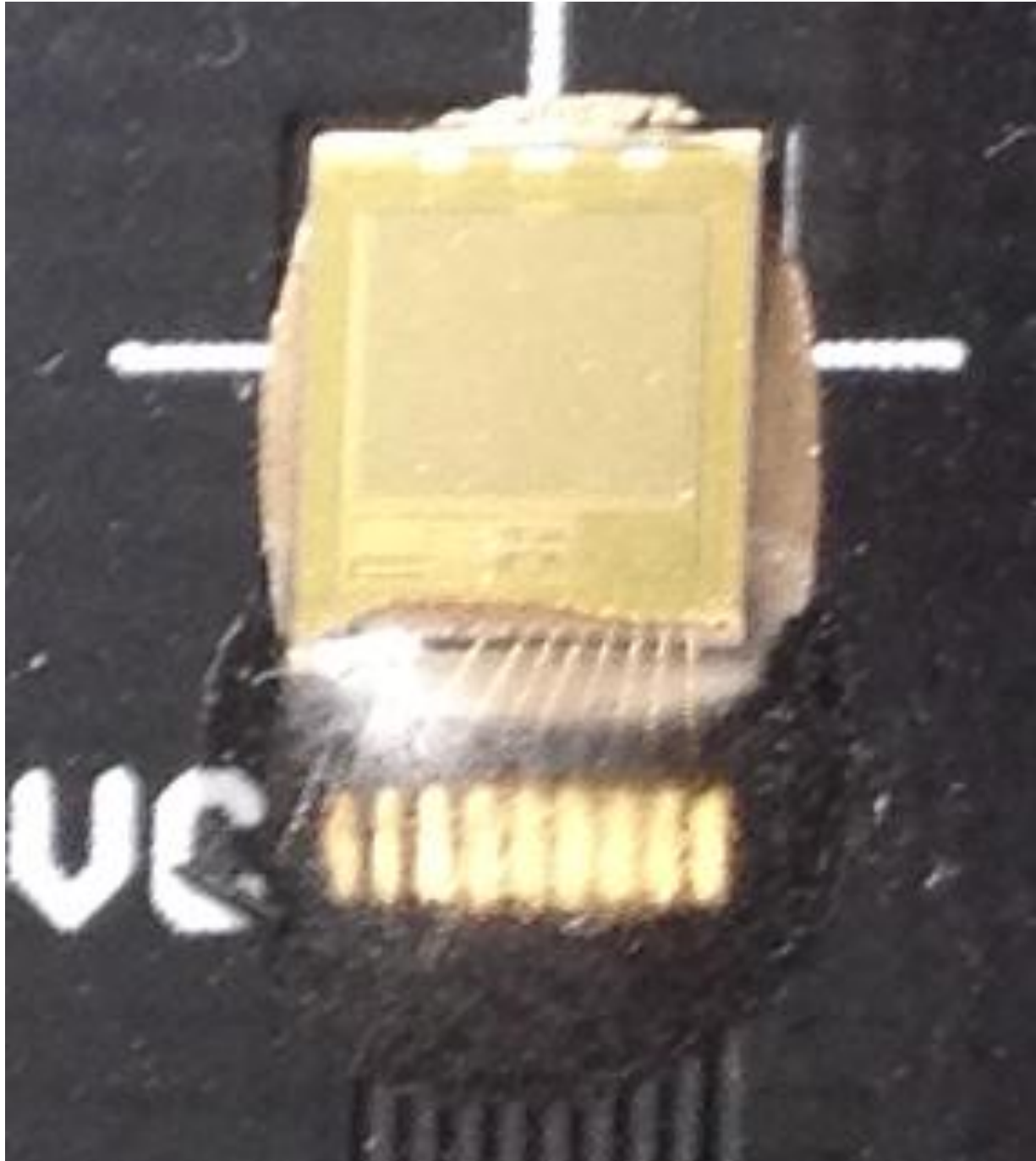


CORRECT

Below is a photograph of a chip wirebonded and correctly encapsulated. A clear UV-curable encapsulant was used for this case, so the wire bonds are visible. The photograph on the following page shows a close-up.

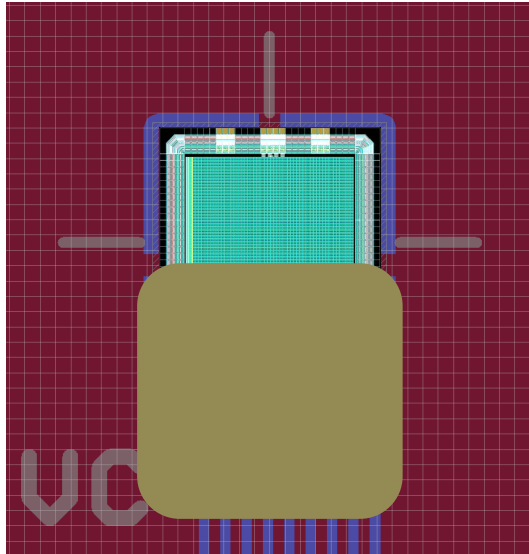


CORRECT

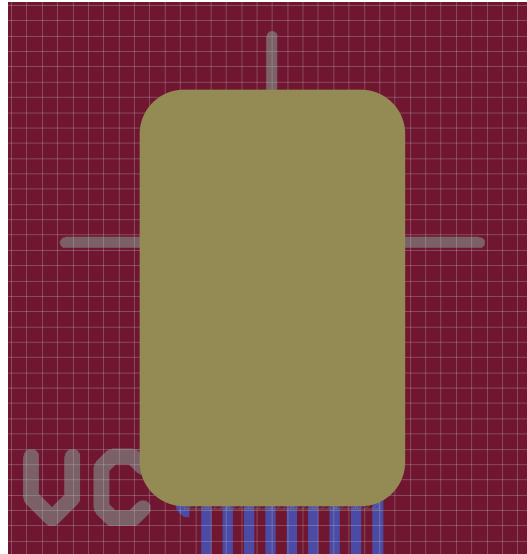


CORRECT

INCORRECT ENCAPSULATION: IMAGE SENSING REGION PARTIALLY OR COMPLETELY COVERED. IF YOU DO THIS THEN THE CHIP IS INOPERABLE!!!



INCORRECT !!!



INCORRECT !!!

General comments:

- 1) PCB is 1 inch x 1 inch (25.4mm x 25.4mm) in size.
- 2) PCB will be shipped to you unpopulated with no parts attached
- 3) PCB will be shipped to you V-scored and panelized
- 4) STONYMAN chips will be sent to you in Waffle Packs.
- 5) Mounting pad for STONYMAN chip on PCB is same size as STONYMAN chip
- 6) STONYMAN chip size is 3665 microns x 4535 microns
- 7) STONYMAN chip is 300 microns thick
- 8) Bonding pads on STONYMAN chip are 85 microns wide
- 9) Bonding pads on PCB are 7 mils (0.007") wide and spaced 7 mils apart
- 10) PCB bonding pads have GOLD finish
- 11) PCB is 31 mills (0.031") thick
- 12) Please remember to encapsulate ONLY the wire bonds
- 13) Please use encapsulant that is rigid when cured.