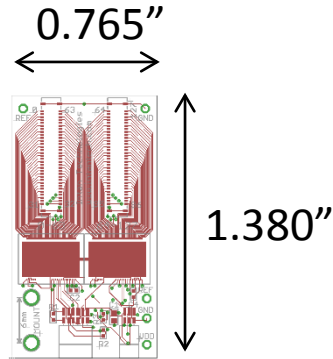


RHD2000 128-Channel Headstage Board

FR406 material, 0.036" thick, ENIG (immersion gold) plating (2 μm)

No through-hole components; only SMDs



actual size

Top Components (12 total)



Omnetics A79623
connector

R1: 100 Ω (0201)

RHD2164 bare dies
(7.3 mm x 4.2 mm)
86 bondwires each

See next page for
bondwire details



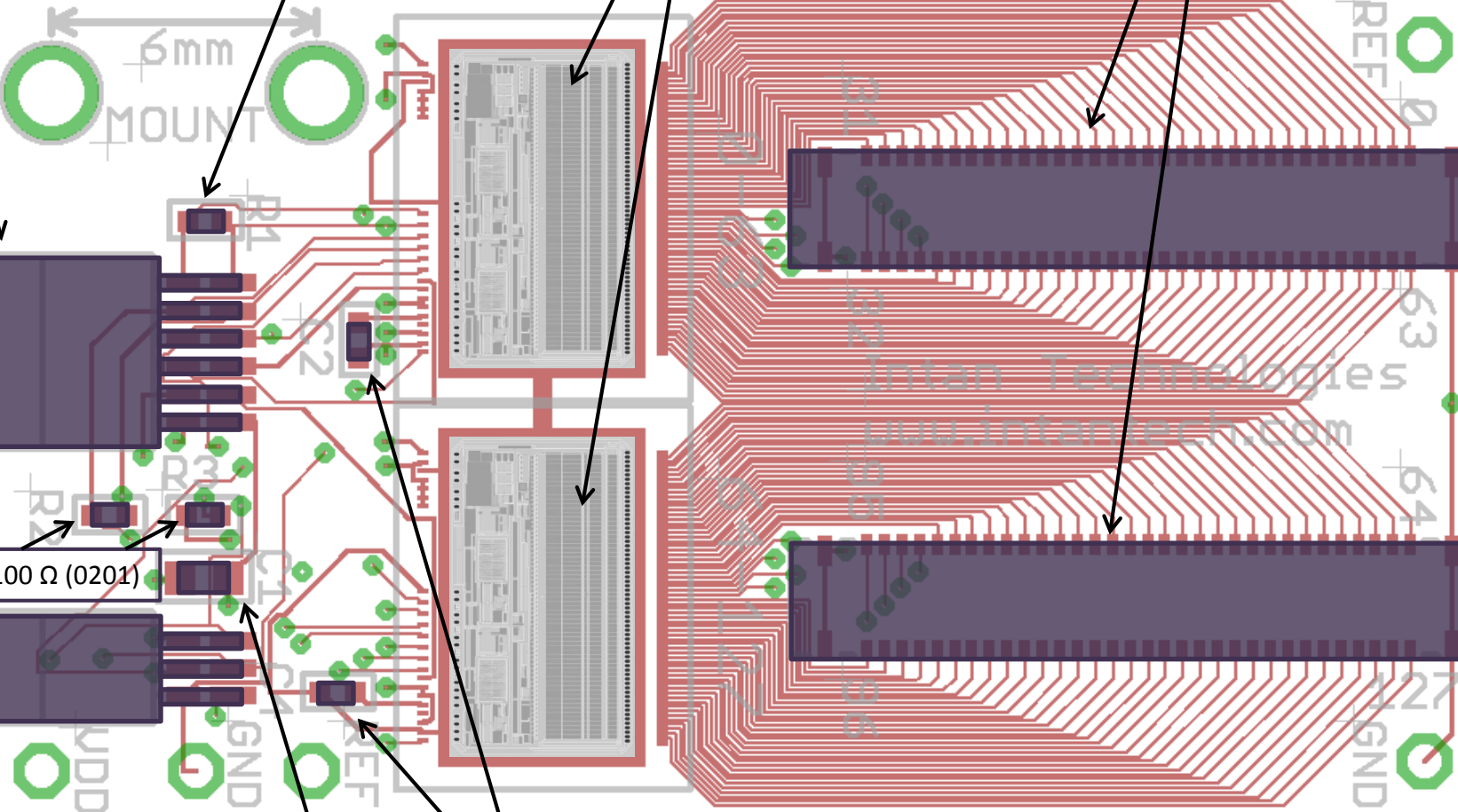
Molex SlimStack
64-pin connectors

R2, R3: 100 Ω (0201)

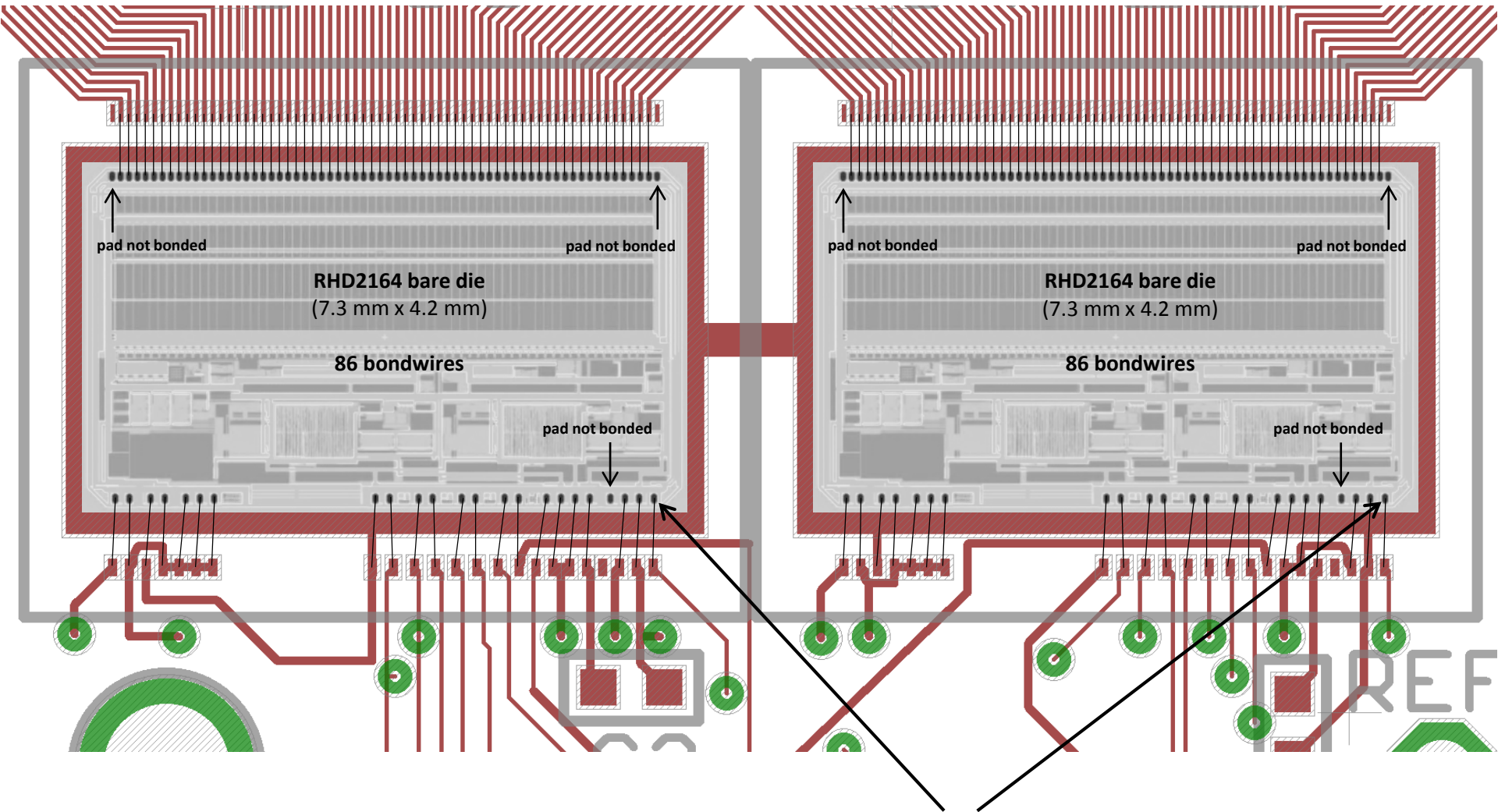
C1: 0.1 μ F (0402)

C2, C4: 0.01 μ F (0201)

Omnetics A79608
connector

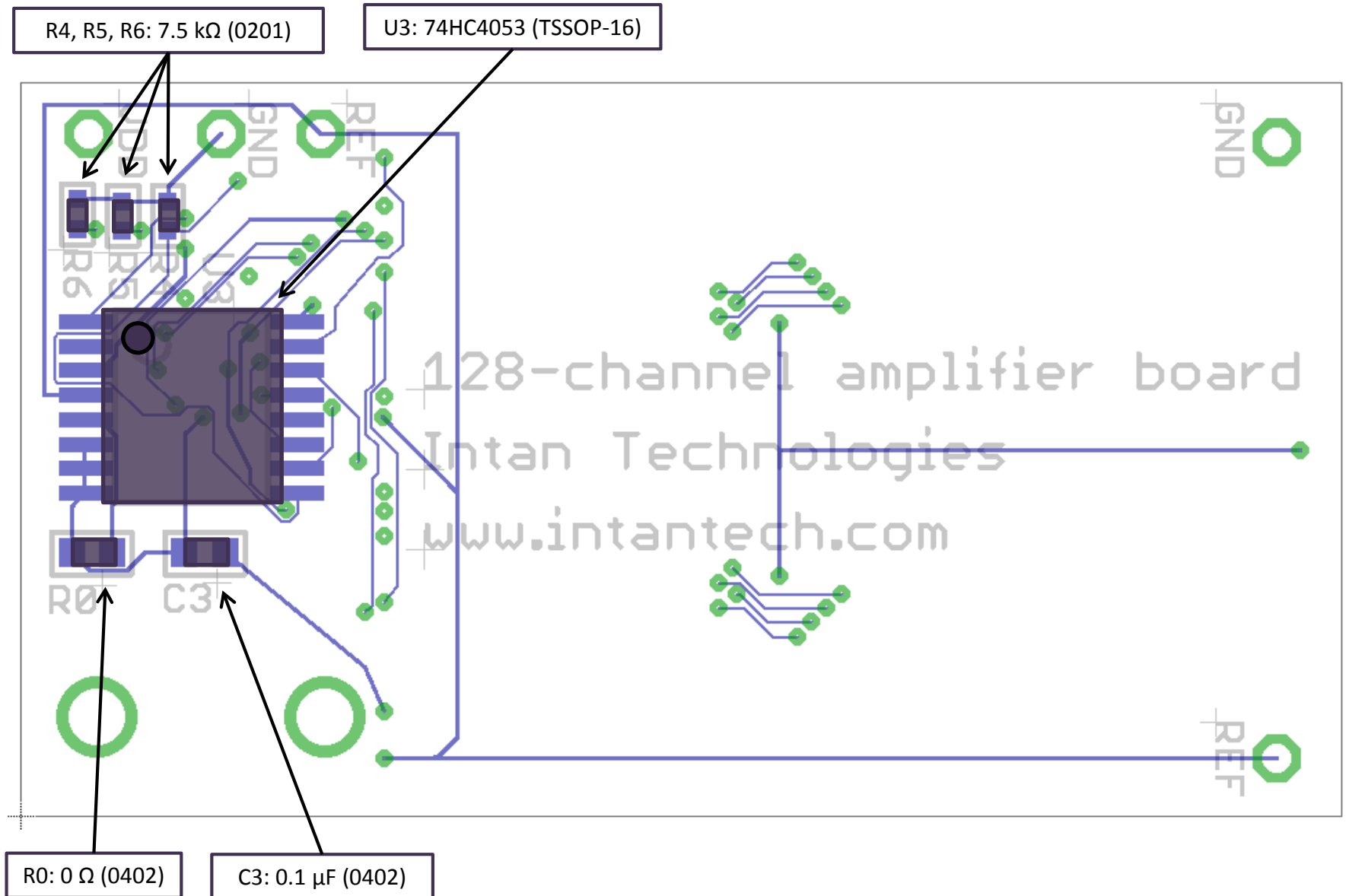


Chip Bondwires – Detail



Note: The bond pads in the lower right corner of the chip were not bonded in our older one-chip board, but they **should** be bonded on this newer two-chip board.

Bottom Components (6 total)



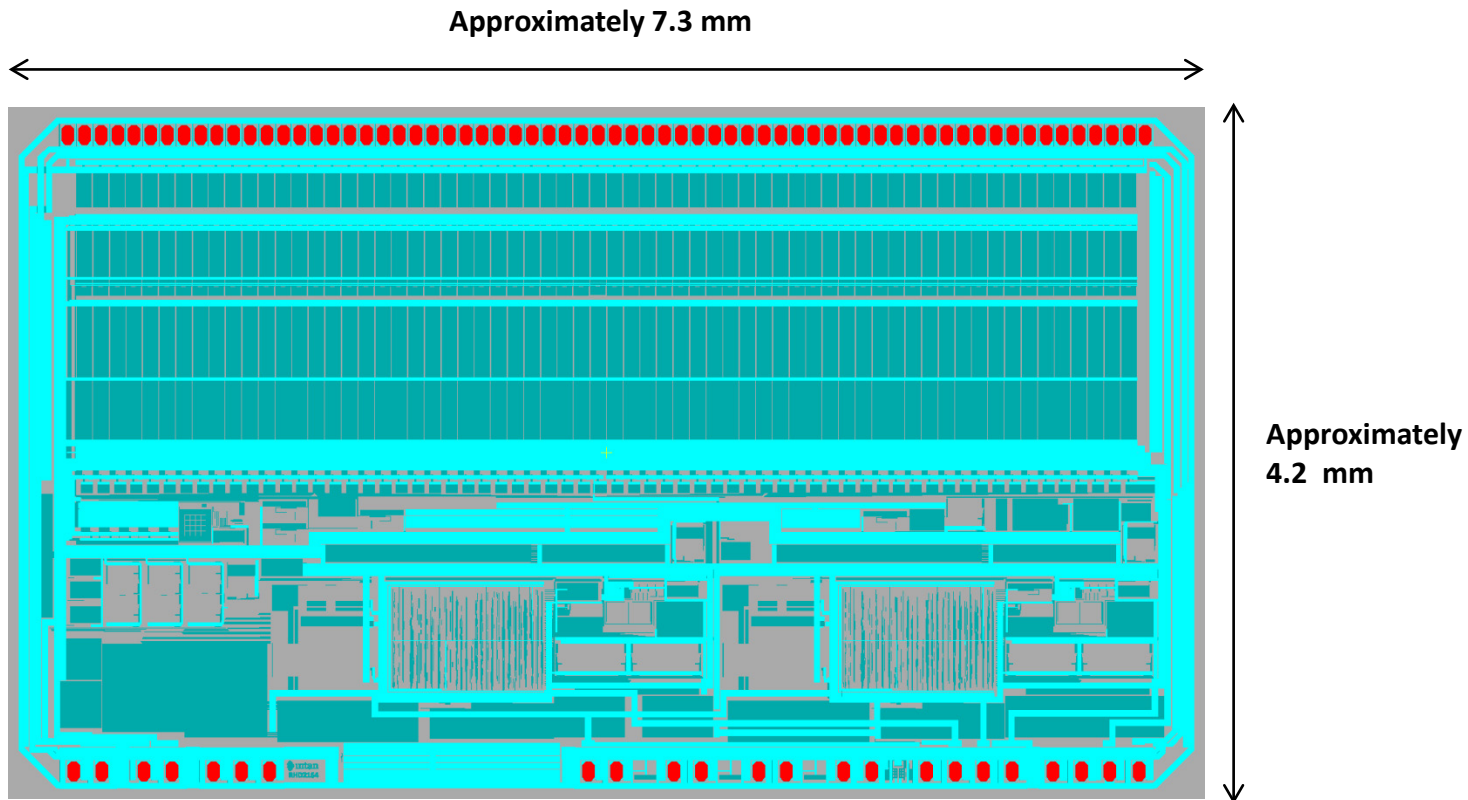
Intan Technologies RHD2164 Bare Die

Gray = approximate outline of die (may vary from die to die due to variations in sawing)

Yellow Cross = center of design (may not coincide precisely with center of die due to variations in sawing)

Blue, Green = top metal layers (highly visible)

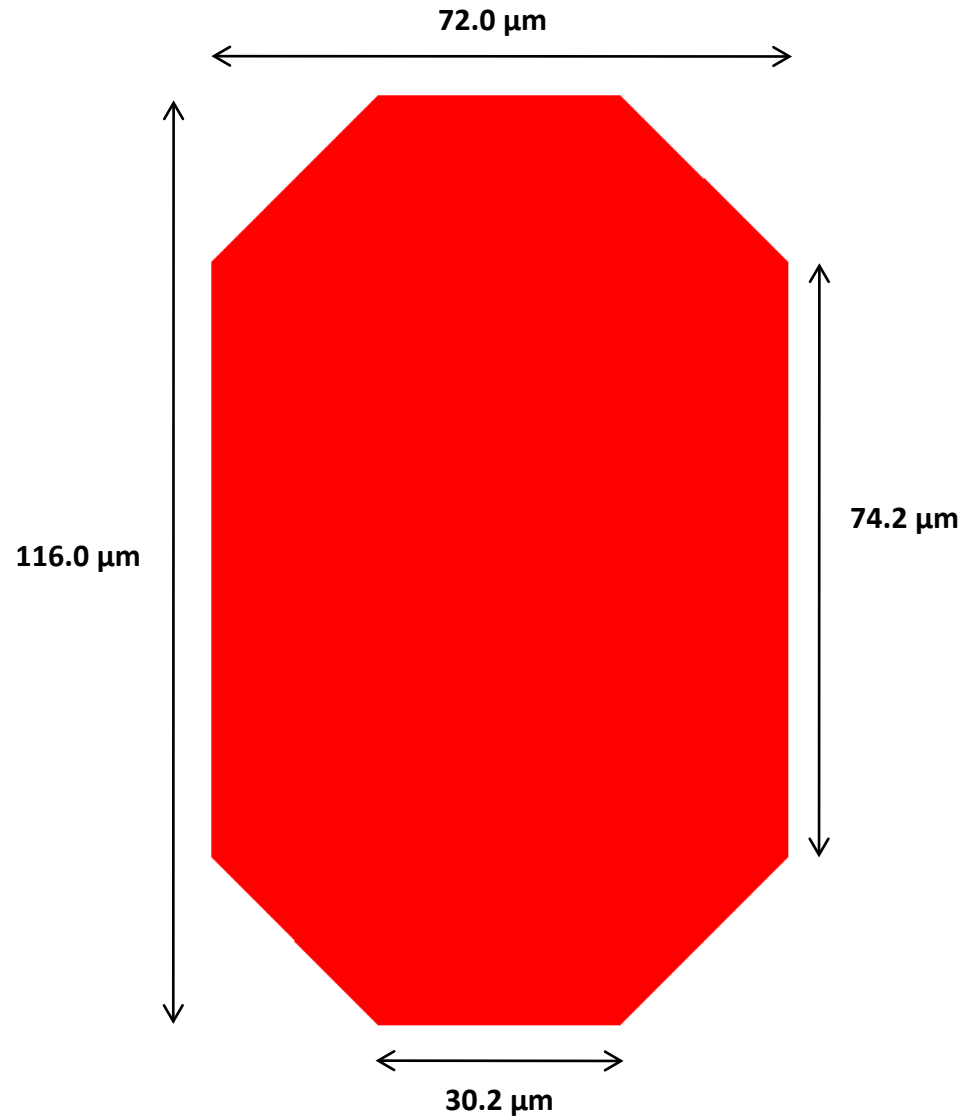
Red = glass openings for bond pads



Each die is 0.20 mm (8 mils) thick

Bond Pad Dimensions

Bond pad metal: AlCu (99.5% aluminum, 0.5% copper)



Minimum bond pad pitch (center to center) on RHD2164: $101.6\ \mu\text{m}$ (4.000 mil)