PHX-1 MCM

Substrate:

The substrate is 48mm x 40mm rectangular and 1.524 (60 mils) thick, fired, white alumina (AL_2O_3, 96%). It has 14 milled wells for 12 Custom Asic die and 2 Xilinx die.

Components:

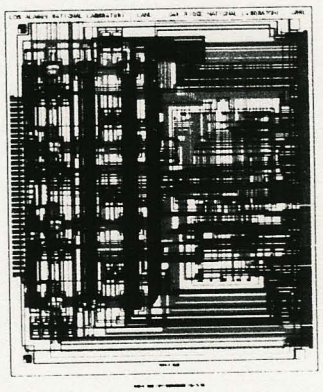
12	Custom Asic, die
2 ~~9~~	Xilinx Component, die
29	Chip Capacitors, surface mount

I/O Contacts

Inputs - 34 contact pads ((1.5mm x 0.45mm pad) 0.7mm pitch)
Outputs - 208 contact pads ((1.5mm x 0.1mm pad) 0.2mm pitch)

Circuitry:

Basemetal - I/O pads, IC die backside metal contact, and 2 high-speed clock lines.
1st metal - Analog signal layer
2nd metal - Power plane
3rd metal - Digital signal layer
4th metal - Ground plane



SCALE: 1:1

General Information:

950 connections (approx.)

Number of Vias	3624
Via Pad Size	0.072mm
Via Laser Drill Size	0.045mm
Minimum Trace Size	0.048mm
Minimum Trace Spacing	0.048mm

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