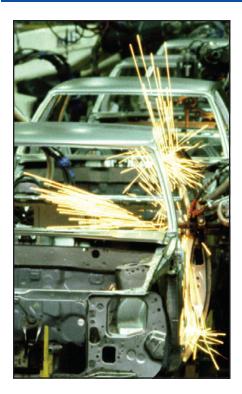
Miniature Analog Design

Design Note #8



Orchid's experience with industrial controls spans both large and small applications. Industrial Controls, Robotics, CAN-Bus, Prophy-Bus and CE-Bus technologies. Orchid designs are innovative and robust.

Size Does Matter!

"Smaller! And use conventional technology." Electronics is not the message in the world of high-vacuum industrial control where miniaturization, reliability, accuracy and day-in, day-out performance really count.

Pressure Sensor Product Family

Orchid Technologies Engineering and Consulting Inc. performed the electronics design and packaging engineering required to retrofit a family of low cost, highly reliable solid state sensors onto our customer's existing venturi-vacuum pump product line. Working within our client's demanding maximum size constraints, Orchid developed a line of miniature analog pressure sensor products which boast big features:

- 15.0 to -15.0 psi Range
- Manual Hysteresis Set Point
- NPN Output Stage
- 0 to 20mA Output Sensor
- 24 VDC Powered

- 0.0 to 150.0 psi Range
- Manual Trip Set Point
- PNP Output Stage
- 0 to 10V Output Sensor
- 1% Accuracy over Range and Temp

Analog Design Packed Under One Cubic Inch

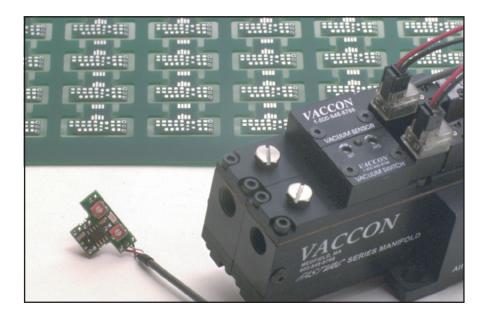
Drawing from Orchid's years of analog design knowhow, we crammed state-of-the-art electronics into a package volume smaller than 1.0 cubic inch. A panelized circuit board design augmented with circuit board assembly options completes the picture by holding inventory costs down.

High Volume Production By Design

Designed for high-volume production, individual units are assembled on a 96-up panel. Orchid's custom designed panelization technique lowers circuit board, incircuit-test, functional test, and inventory costs.

Orchid Technologies Engineering and Consulting Inc.

Thinking about that challenging project? Call Orchid today, we can perform precision state-of-the-art analog circuit design for you too.





ORCHID TECHNOLOGIES
ENGINEERING & CONSULTING INC.

Custom Engineering From Concept to Production

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