imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



ECHELON

Power Line Development Support Kit (PL DSK 2.3)

Get a fast start designing LonWorks® power line devices





A must-buy to get started with designs based on PL 3120° / 3150° / 3170 Smart Transceivers, the PL DSK includes a variety of resources to reduce your development time and engineering effort.

With multiple power line device reference designs included, design engineers have the flexibility to pick a design that suits their application with a high degree of confidence that components will be available to meet their design goals from both cost and size perspectives,

Reference Design Features

- Provides schematics and layouts for the external discrete interface circuitry that needs to be implemented with the Echelon Power Line Smart Transceiver IC.
- Eight reference designs included.
- New, smaller PL 3120 / PL 3170 single in-line package (SIP) design included.
- Available as a download for fast access, providing a quick start for PL design projects.
- Design Features
- Manages heat dissipation with optimally designed traces, component selection, and placement.
- Ensures proper circuit operation with controlled trace capacitances based on the crystal's oscillation frequency.
- Provides verified communications performance for receive sensitivity and transmit power.
- Deals with interference and noise impairments.
- Provides flexibility with two- and four-layer designs; and one- and two-sided designs.
- Design Content
- Layout files for P-CAD^{*}, OrCAD^{*}, PADS^{*}/PowerPCB, Altium, PDF (Adobe), PDIF, ASCII, and Gerber formats for fast and accurate reference design porting.
- Bill of Materials and schematics in OrCAD & PDF format.
- Technical details on supported layout tools is available in the PL 3120 / PL 3150 / PL 3170 Power Line Smart Transceiver Data Book

Hardware

- Hardware is not included, but is available separately in the Echelon Model 10000R-40-27 Mini FX/PL Evaluation Kit.
- The separate Mini FX/PL kit includes: two evaluation boards with universal power supplies, two I/O boards, U20 USB Network Interface, Neuron C Compiler, and example software.

Specifications

PL 3120 / PL 3170 Power Line Smart Transceiver Approximate Design Dimensions:

- 2 layer 1 sided (rectangular format):
 0.9 in x 2.5 in (23 mm x 63 mm)
- 2 layer 1 sided (square format): 1.3 in x 1.5 in (33 mm x 38 mm)
- 4 layer 2 sided (SIP design): 0.7 in x 1.5 in (17 mm x 38 mm)
- 4 layer 2 sided: 0.8 in x 1.5 in (20 mm x 38 mm)
- 4 layer 2 sided with 2A p-p transmit amplifier: 1.2 in x 2.1 in (31mm x 53mm)
- 4 layer 2 sided (SIP design): 0.7 in x 1.1 in (17 mm x 28 mm)
- PL 3150 Power Line Smart Transceiver:
- 4 layer 2 sided: 1.4 in x 1.9 in (36 mm x 49 mm)
- 4 layer 2 sided with 2A p-p transmit amplifier: 1.9 in x 2.6 in (48 mm x 66 mm)

Documentation

Introduction to the LonWorks Platform

PL 3120 / PL 3150 / PL 3170 Power Line Smart Transceiver Datasheet

PL 3120 / PL 3150 / PL 3170 Power Line Smart Transceiver Data Book

- PL 3120 Evaluation Board Schematic
- PL 3150 Evaluation Board Schematic

MiniGizmo Board Schematic

Ordering Information

Power Line Development Support Kit (PL DSK) 2.3 17050R-23-27



© 2014 Echelon, LonWorks, and the Echelon logo are trademarks of Echelon Corporation registered in the United States and other countries. IzoT is a trademark of Echelon Corporation. Content subject to change without notice.