

SPFEIM100_G

Fiber Optic Transceiver For Fast Ethernet



Product Brief

Description

The SPFEIM100-G is an optical transceiver for low-cost plastic optical fibers designed for home consumer applications.

With worldwide IPTV rollouts gaining momentum the need for a simple, cost-efficient solution for streaming video is getting more urgent. as shared-media connections like WLAN or powerline suffer from quality of service problems and standard Ethernet cable is difficult to install plastic optical fiber is the optimum solution for video streaming and home networking applications.v

Main Parameters

Link length	Up to 50 m
Operating temperature	0 – 70°C
Supply voltage	3.3 V
Power budget	11 dB
Peak wavelength	650 nm (red)

Ordering code: SP000304105

SPFEIM100_G



Size: 21.6 x 20 x 16.5 mm

Features

- Easy installation, fiber needs no connector, just cut and plug
- Thin 1.5 x 3 mm dual core fiber, cross section area 6 times smaller than standard Cat5 Ethernet cable
- High pull-out force of fiber when locked
- Fast Ethernet 100 MBit/s transmission over plastic optical fiber
- Directly interfaces to Fast Ethernet switch ICs like Infineon's ADM6992 (one chip solution)

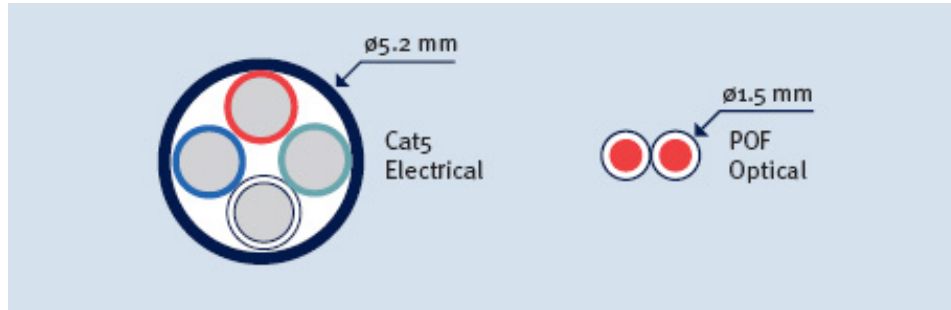
Applications

- IPTV connection high-speed-gateway to set-top-box
- Home networking
- Suitable for applications requiring high quality-of-service like video-streaming or online-gaming
- Industrial applications

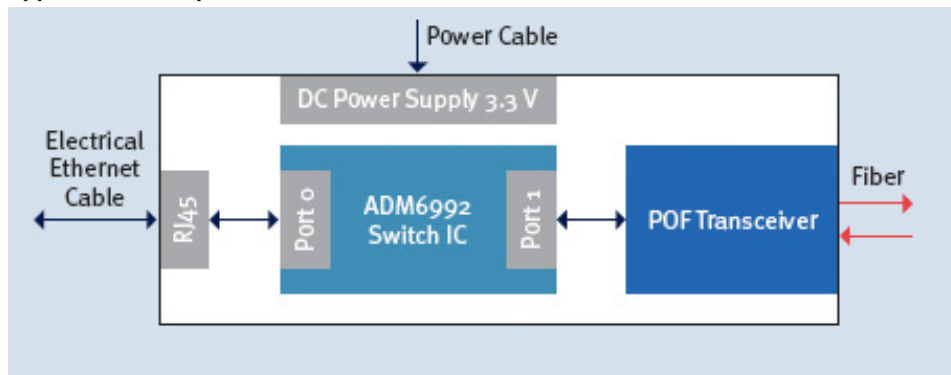
Device Examples

- Media converter devices
- High-speed home gateways and
- IPTV set-top-boxes with integrated
- POF interface
- POF switches with multiple electrical / optical inputs / outputs

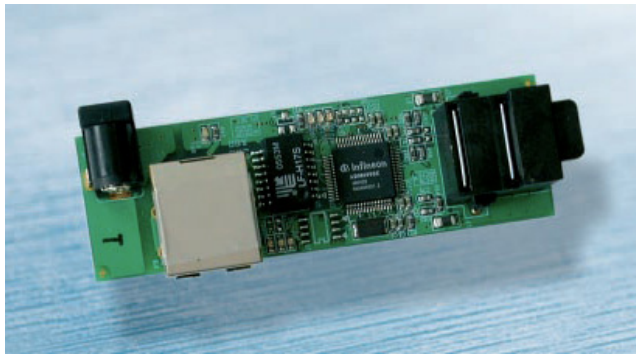
Cross Section Cat5 electrical vs. POF Optical Cable



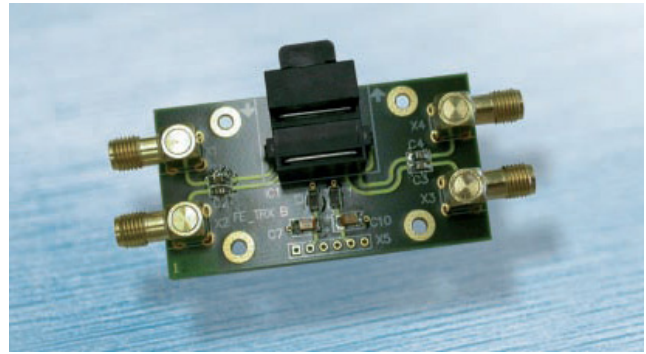
Application Example Media Converter



Reference Design Media Converter



Transceiver test board



Supporting Tools

- Datasheet
- Evaluation Board
- Application note
- Reference design media converter
- Reference design home media distribution center (available from Infineon Technologies)

For product information and a complete list of distributors, please go to our web site: www.avagotech.com

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