



SiI 7170 iTMDs Transmitter



Applications

- Direct view HDTV
(LCD and PDP) internal link
- Rear projection HDTV
(DLP, LCOS, and LCD)
internal link
- Projectors
- Multi-functional monitors

Silicon Image introduces SiI 7170™ iTMDs (internal TMDs) transmitter product for high bandwidth needs of direct view LCD/plasma and rear projection (LCOS, DLP, and LCD projection) digital televisions (DTVs), LCD monitors, and projectors.

While DVI 1.0-compliant for external applications, the SiI 7170 is ideal for internal link of DTVs, monitors, and projectors. Innovative SiI 7170 architecture adds new encoding method for high color depth support including 8, 10, 12, or 16 bits per color. Silicon Image advance design technique allows single link SiI 7170 operation of 225MHz bandwidth to support 720p/1080i/1080p resolution with 12-bit per color at 60 refresh rate. The SiI 7170 enables billions of color for HDTVs, leading to exceptional digital visual quality.

SiI 7170 incorporates advanced on-chip input clock jitter filter to ensure clean output to receiver. SiI 7170 also adds spread spectrum clock interface to significantly lower EMI. The SiI 7170 is available in a 128-MQFP Universal environmentally friendly Pb free package.

Single link SiI 7170 provides bandwidth to support today's 720p and tomorrow's 1080p digital TVs at 8, 10, 12, or 16 bits per color using only four differential signal pairs (three data pairs and one clock pair). Using today's LVDS technology will require two channel with up to 12 differential signal pairs. The SiI 7170 provides significant cost savings for the digital TV internal interface by reducing the chip count from two to one and dramatically reducing the cost of cable assembly by cutting the number of wires needed.

Texas Instruments selects the SiI 7170 for 720p/1080p 10-bit Digital Light Projection (DLP) reference because it brings revolutionary solution to address the fast growing band width demand of the digital TV internal interface while reducing overall bill of material (BOM) cost.



