

Flat-Screen TV System Solution

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Input/Output (Including UI, Sensors)

For energy-saving equipment via human body detection

Distance measuring sensor unit (for LCD monitors)

- Effect from reflective matter's color and reflectivity is small
- Distance measuring range: 10 to 150 cm (voltage output according to the distance)



For reception of image data transferred between equipment

IR (infrared) data communication device (IrSS™ reception only)

- Enables high-speed transfer of image data using new protocol



For TV ambient light detection

OPIC light detector with visual sensitivity characteristics

- Peak sensitivity characteristic close to human visual sensitivity
- Compact package



For wireless operation of devices

IR detecting unit for remote control

- Operating voltage: 2.7 to 5.5 V



Holderless-type IR detecting unit for remote control

- Operating voltage: 2.7 to 5.5 V
- Holderless form enables board mounting suited to the design of various set devices using a single model



Compact, thin, surface-mount IR detecting unit for remote control

- Operating voltage: 2.7 to 5.5 V
- Compact, surface-mount reflow compatible



For digital audio signal transmission

Fiber optic transmitter (optic fiber link)

- High-speed signal transfer type



For wireless LAN

Wireless LAN / Bluetooth combo module



- 2.4 GHz band power amplifier
- 5 GHz band power amplifier
- 2.4 GHz/5 GHz band power amplifier



For TV broadcast reception

- Combination front-end units for digital terrestrial/digital satellite broadcasting
- Combination front-end units for digital terrestrial/digital analog terrestrial/digital satellite broadcasting
- Digital terrestrial compound receiving module



Display

For image display

TFT LCD controller

- Mini-LVDS-compliant interface
- For 1 366 × 768 WXGA compatible display
- Improved response speed of LCD image thanks to SHARP's unique Quick Shoot technology (with built-in frame memory)



TFT LCD driver

- Mini-LVDS-compliant interface
- Varied lineup of 414-output, 720-output and 960-output products (256-level grayscale), and 720-output products (1 024-level grayscale)



For backlight

LED driver

- A lineup of LED drivers necessary for backlights in LCDs ranging from small- to large-size



For LCD backlight

High-luminosity surface-mount LED

- 2 828 size
- 4 214 size
- High reliability



For image display

TFT LCD module

- These LCD modules are only made to order.

Power Supply

For circuit voltage stabilization

- DC-DC converter
- CMOS chopper regulator (Bootstrap system)
- Step-up chopper regulator
- Low power-loss voltage regulator



DC-DC converter



CMOS chopper regulator



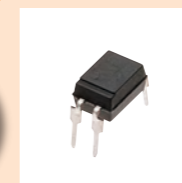
Low power-loss voltage regulator

- Sink source regulator

For insulation of and transfer between high- and low-voltage sides of power supply

Photocoupler compliant with safety standards

Safety standard approved / compliant



For DC power supply

- Built-in energy-saving power supply «customizable»
- LED-backlight-compatible built-in power supply «customizable»