Flat-Screen TV System Solution

**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**

- **For TV broadcast reception**
  - **Combination front-end units for digital terrestrial / digital satellite broadcasting**
  - **Digital terrestrial compound receiving module**

**Power Supply**

- **For circuit voltage stabilization**
  - **DC-DC converter**
  - **CMOS chopper regulator** (Bootstrap system)
  - **Low power-loss voltage regulator**
  - **Sink source regulator**

- **For insulation and transfer between high- and low-voltage sides of power supply**
  - **Photocoupler compliant with safety standards**

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

**Display**

- **For image display**
  - **TFT LCD controller**
    - Mini-LVDS-compliant interface
    - For 1 366 x 768 WXGA compatible display
  - **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 circuit voltage stabilization**
  - **High-luminosity surface-mount LED**
    - • 2.828 size
    - • 4.214 size
    - • High reliability

- **For LCD backlight**
  - **TFT LCD module**
    - These LCD modules are only made to order.

- **For image display**
  - **TFT LCD module**
    - • 2.828 size
    - • 4.214 size
    - • High reliability

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

- **DC-DC converter**
- **CMOS chopper regulator (Bootstrap system)**
- **Low power-loss voltage regulator**
- **Sink source regulator**

- **Safety standard approved compliant**

- **For reception of image data transferred between equipment**
  - **Photocoupler compliant with safety standards**

- **For wireless operation of devices**
  - **High-speed signal transfer type**
  - **Fiber optic transmitter (optic fiber link)**
    - • 2.828 size
    - • 4.214 size
    - • High reliability

- **Built-in energy-saving power supply**
  - «customizable»

- **LED-backlight-compatible built-in power supply**
  - «customizable»

- **Mini-LVDS-compliant interface**
  - • For 1 366 x 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
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