

## TW2880

FN7749

Rev. 1.00

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# Multi-Channel Surveillance Camera Controller with VGA/HDTV Display Capability

## Summary

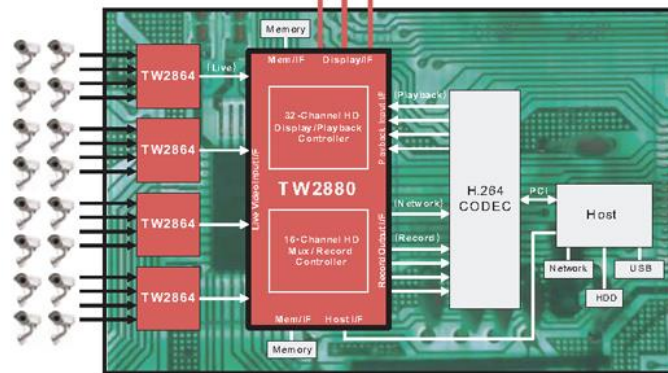
### Display Controller Features List

- Supports 1080p HDTV and VGA Display
  - Horizontal size: 640 ~ 1920, Vertical size: 480 ~ 1080
  - Max pixel clock: 174 MHz (if MCLK > 166 MHz)
  - Vertical Refresh frequency: Flexible, can be programmed as 50, 56 or 60 Hz
  - Flexible output interface, Analog VGA (HD15), Digital VGA (DVI) and HDMI (V1.2)
  - Capable of displaying up to 33 Channels in one screen, live video or playback combined.
  - 2 HD channels through playback interface and in BT.1120 format.
  - Motion Box (MD) on all display channels.
  - User selectable Weave/2D/3D de-interlacing method for video quality enhancement
  - Up / down scaler for arbitrate windows size
  - Three layers of OSG overlay with High-color (16 bit) bit map
  - OSD display layer for title and channel ID
  - Single Box Display for highlighting and Mouse / Cursor Overlay
- Video Input from Decoder Interface
  - Support 27 MHz BT.656 input
  - Support 54,108 MHz BT.656 byte-interleaved input
  - Motion Box (MD) on all display channels.
  - D1/Half D1/CIF selection
- System clock at 108MHz, Memory clock 166 - 180 MHz
- I<sup>2</sup>C and 108 MHz parallel MCU host interface

### Recording Controller Features List

- High flexibility record output function
  - Real time field interleaved, frame interleaved output
  - Priority recording
  - Multi-mode output controlled by user
- High flexibility Spot output function
  - Four individual output
  - Full/Half/CIF display with OSD
  - Automatic switching
- Random sequence recording(Table recording) function
- Motion Detector & Channel ID Encoding / Decoding
- Embedded font-RAM for color OSD
- Split border and background color setting

**HD 1080p Main Display**  
(Live/Playback Video + Map + Control Panel)



**Advanced 16 - Channel DVR System**

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