

## DESCRIPTION

PT16206C is a LTPS LCD driver with controller used for automotive applications such as HUD or FMD, which receives CMOS RGB 18/24-bit or LVDS 18/24-bit digital signals, and drives the liquid crystal panel and uses the 3, 6 and 9 selectors with up to 720 output channels.

## FEATURES

- Support Resolutions
  - 640 RGB x 480
  - 800 RGB x 480
  - 1060 RGB x 720
  - 1280 RGB x 560, 1280 RGB x700
  - 1440 RGB x 300
  - 1600 RGB x 320
- (If other resolution is intended to use, please confirm with PTC)
- Display Color: 16.7M/262K color
- Source Output: 720 outputs
- Gate Output: 16 outputs (total 32 outputs on both side)
- MUX Output: 3/6/9 outputs
- VCOM Scheme: DC
- Input Interface
  - RGB: 24/18 bits
  - PCLK: 4.5 ~ 65MHz
  - 3/4 wire serial command interface
  - LVDS: 24 /18 bits
  - CLKP/CLKN: 4.5 ~ 65 MHz max.

- Output DAC / AMP Specification
  - Source output potential:  $\pm 0.2 \sim \pm 7.4V$
  - Source Settling Time: 2.2 $\mu s$
- RGB independent 18-point Gamma-DAC adjustment
- VCOM Output Specification
  - VCOM DC Output Adjustment: -1V ~ 0V
- OTP
  - 576 bytes user writable
- Main Specifications
  - Analog Power: 2.6 ~ 3.6V
  - Interface Power: 2.6 ~ 3.6V
  - Logic Power: Typical 2.0V
  - Source Driver Power: 4.6 ~ 7.7V
  - Panel Signal Power (positive): 5.7 ~ 12.0V
  - Panel Signal Power (negative): -10.0 ~ -5.0V
- COG package

## APPLICATION

- Small Automotive LTPS-TFT LCD panel driver