



# THCV333-Q

Audio Visual Serializer with bi-directional transceiver

## 1. General Description

THCV333-Q video serializer is designed to support 1080p60 24bit uncompressed video data by V-by-One® HS II Forward Channel (FC) on 100ohm differential STP or 50ohm Coaxial cable between Open-LDI (LVDS) (oLDI) output graphic processor and panel display.

THCV333-Q supports audio.

THCV333-Q supports bi-directional command communication including 2-wire interface and GPIO, which can control and monitor touch panel at remote side.

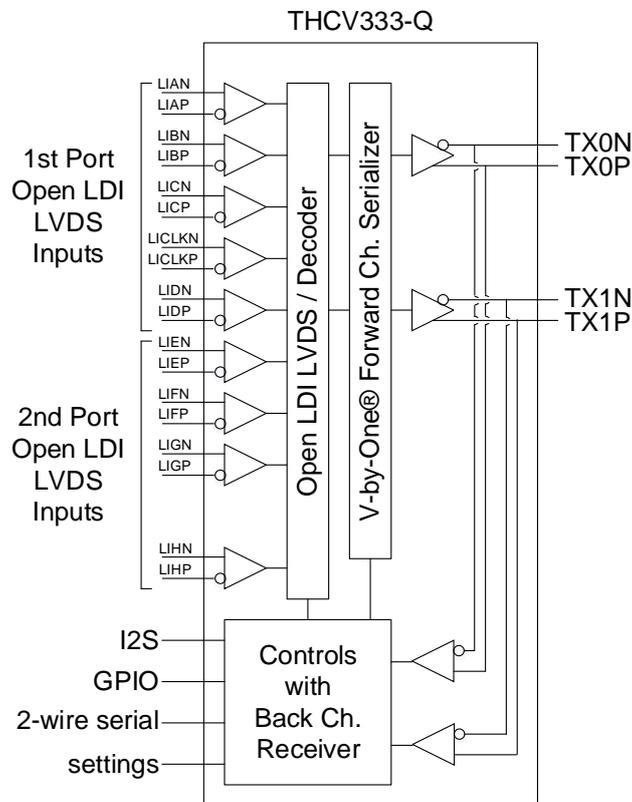
## 2. Applications

- Automotive Infotainment Display
- Instrument Cluster Display
- Touch Screen Monitor and Panel Display
- Security and Surveillance Camera

## 3. Features

- AEC-Q100 Grade2 (-40 to 105°C)
- Forward Channel V-by-One® HS II 3.75Gbps 2lane
- Open-LDI(LVDS) Single to FC 10 to 109MHz
- Open-LDI(LVDS) Single to 2xFC 50 to 150MHz
- Open-LDI(LVDS) Dual to FC 50 to 109MHz
- Open-LDI(LVDS) Dual to 2xFC 50 to 218MHz
- Color depth per pixel: 18bit or 24bit
- Back Channel GPIO support up to 120kbps
- 2-wire 1Mbps serial interface bridge function
- Remote side GPIO control and monitoring
- 15 meters of cable transmission
- Wide range IO voltage from 1.71V to 3.465V
- Additional spread spectrum on data stream
- Error Detect and Notification
- 0.5mm pitch QFN64 9x9mm package

## 4. Block Diagram



## 5. Notices and Requests

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