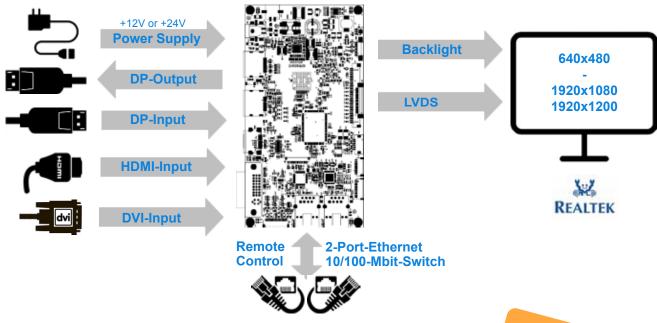
## **III** Display Solution

## d.scaleHD+

Network based remote controlled LCD-TFT Scaler Board

#### **Developed and manufactured in Germany**

The d.scale-HD+ is a cost-effective, innovative scaler board solution providing HDMI, DP-MST and DVI input interfaces based on Realtek's RTD2486 scaler family. It acts as a direct interface for LCD-TFT displays from VGA up to Full-HD/WUXGA and provides an Ethernet based remote-control.



#### Benefits

- DP-MST (DisplayPort MultiStream) allows to daisy-chain up to 4 (6) monitors with a total 4K resolution – e.g 4x Full-HD
- Remote OSD-control/diagnostic via 10/100Mbit Ethernet connection with integrated 2-port switch
- Reduced power dissipation by using very high efficient power circuitry
- Improved EMI behaviour

### **Features**

- Support Monitor Control Comand Set (MCCS) remotely on LAN via browser, web-terminal or API
- Over LAN accessible I2C-/SPI-Bus allows connection of various diagnostic and control scenarios
- Support non-linear scaling from 4:3 to 16:9 or 16:9 to 4:3
- Supports displays with 3.3V/5.0V/12V logic supply and 5.0V/12.0V/24.0V backlight





# d.scaleHD+

#### **Board Features**

- HDVI, HDMI,DP input and DP output
- Supports LCD-TFT displays from VGA up to 1920x1080
  - Single/dual channel LVDS
  - 18-/24-bit color
  - · Open-LDI & PSWG (VESA) data mapping
- Supports 3.3V/5V/12V LCD-TFT logic Supply from a single +12V/+24V input

- Display Backlight support
  - Provides enable and brightness control
  - 5V/ 12V supply
- Spread-Spectrum DPLL to reduce EMI
- Supports external 5-button key-pad
  - Power on/off
  - Left/Right
  - Back/Exit
  - Menu/Enter

# RTD2486 Core Features REALTEK



- HDMI 1.3 with optional HDCP support
- DisplayPort 1.2 with optional HDCP 1.3
  - Supports 4 lanes with up to 1.62Gbps and 2.7Gbps
  - 6-/8-/10-/12-bit color depth transport
- Color Processor
  - sRGB compliance
  - Brightness and contrast control

- ViviColorTM
  - Independent color management (ICM)
  - Dynamic contrast control (DCC)
  - Precise color mapping (PCM)
- Advanced Scaling
  - Sharpness/Smooth filter enhancement
  - Support non-linear scaling from 4:3 to 16:9 or 16:9 to 4:3

## **Applications**

- Daisy-Chained digital signage monitors up to 4 Full-HD displays
- Mid size monitors with single 12V /24V supply
- All-in-one HMI Displays

#### **Outline Dimensions**



#### Versions available

- DVI, HDMI, DP input
- DP-MST: DP input + DP output
- · Ethernet remote control with embedded 10/100 Mbit switch
- +12V or +24V Single Supply

#### **Environmental**

- Operating Temperature: 0°C to 70°C
- Relative Humidity: 5%-85%, non condensing



For customized designs please ask your local sales representative