

RTD2023B car

1. Features General

- Embedded dual DDC with DDC1/2B/CI, fully compatible with Portrait Display
- Zoom scaling up and down
- No external memory required.
- Require only one crystal to generate all timing.
- Programmable 3.3V/5V detection reset output.
- Embedded crystal output to micro-controller.
- 3 channels 8 bits PWM output, and wide range selectable PWM frequency.

Analog RGB Input Interface

- Integrated 8-bit triple-channel **165/110 (Optional)** MHz ADC/PLL
- Embedded programmable Schmitt trigger of HSYNC
- Support Sync On Green (SOG) and various kinds of composite sync modes
- On-chip high-performance hybrid PLLs
- High resolution true 64 phase ADC PLL

Video Input Interface

NTSC/PAL/SECAM 4x10bit, YPbPr/RGB inputs, 5 line comb filter and SCART Support.

Auto Detection /Auto Calibration

- Input format detection
- Compatibility with standard VESA mode and support user-defined mode
- Smart engine for Phase/Image position/Color calibration

Scaling

- Fully programmable zoom ratios
- Independent horizontal/vertical scaling
- Advanced zoom algorithm provides high image quality
- Sharpness/Smooth filter enhancement
- Support non-linear scaling from 4:3 to 16:9 or 16:9 to 4:3

Color Processor

- True 10 bits color processing engine
- sRGB compliance
- Advanced Dithering logic for 18-bit panel color depth enhancement
- Content adaptive edge enhancement.
- Dynamic overshoot-smear canceling engine
- Brightness and contrast control
- Programmable 10-bit gamma support

Output Interface

- Fully programmable display timing generator
- Flexible data pair swapping for easier system design.
- Programmable TCON function support
- Multi-output interface (RSDS/LVDS/TTL) on single PCB
- Spread-Spectrum DPLL to reduce EMI
- Fixed Last Line output for perfect panel capability

Audio Amplifier

- Max 2.6W , 4 Ohm X 2 Channel

Dimension

- 68.2 x 126 mm