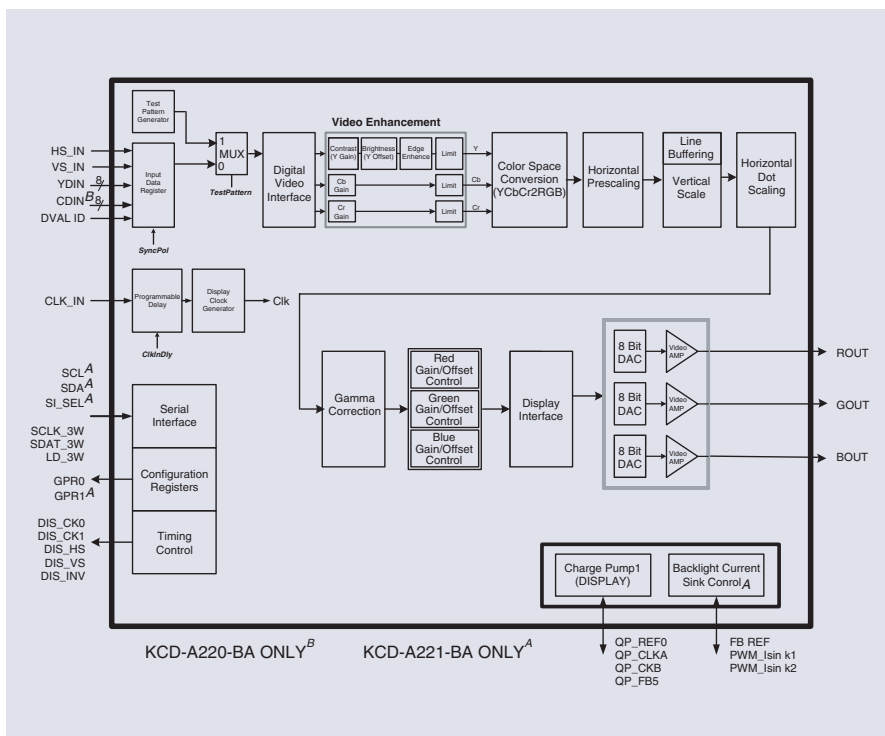


## FEATURES

- Supports CyberDisplay® 113K LV / 152K LV or 230K LV / WQVGA LV
- Supports NTSC or PAL systems
- Digital video input formats
  - BT656
  - RGB(8,8,8) or RGB(5,6,5)
- 3-wire serial interface (A220)
- 2-wire and 3-wire serial interfaces (A221)
- Horizontal and vertical scaling
- Programmable gamma correction
- RGB 8-bit DACs and video amplifiers
- Contrast, brightness, and sharpness control
- Programmable gain and offset control on RGB signal
- 3.3V operating voltage
- 49 FBGA package

### BLOCK DIAGRAM



\*Specifications subject to change without notice

## Functional Description

The A220 and A221 are both highly integrated driver ICs that support Kopin's CyberDisplay® 113K LV, 152K LV, 230K LV and WQVGA LV color displays. They are designed to accept BT656 digital video source, and generate analog RGB for the CyberDisplay® products.

The driver ICs include three 8-bit DACs, video amplifiers and one charge pump for -5V power supply voltage to the display. They contain color space conversion from YCbCr to RGB and horizontal and vertical scaling to accommodate different display resolutions.

The A220 supports a 3-wire serial interface. The A221 supports both 2-wire and 3-wire serial interfaces.

The A221 also includes one PWM (Pulse Width Modulator) controller for backlight brightness.

### DISPLAY MARKETING

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