



Displays

- Digital RGB
- Analog RGB
- LVDS
- OSD
- Character
- Monochrome

Overview

Display technology plays a critical role in how information is conveyed. As a picture is worth a thousand words, display technology simplifies information sharing. With sophisticated display technologies, next generation displays will be lighter, thinner, flexible, more adaptable, power efficient and conform to the changing needs of society.

Services

Aftek has worked extensively with a wide variety of display interfaces such as digital RGB, analog RGB, LVDS (Low Voltage Differential Signal) & OSD.

Aftek's services for display based solutions encompass

Display Component Selection

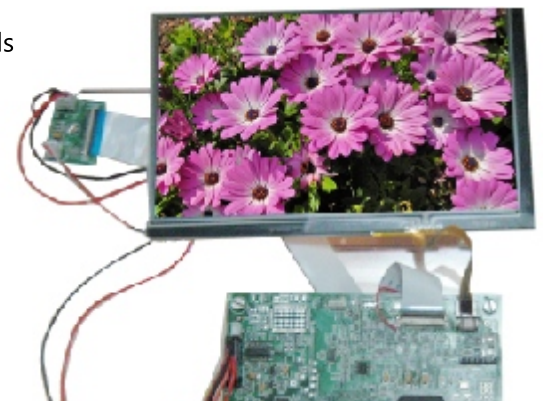
- ✓ Selection of appropriate LCD module based on application requirement & embedded platform capabilities. Following are some of the parameters we
 - ♦ Type of LCD panel such as TFT or STN display, character and monochrome
 - ♦ Resolution such as QVGA, VGA, WVGA
 - ♦ Brightness & contrast ratio
 - ♦ Pixel clock requirement
- ✓ Factors considered for selection of backlight are as follows
 - ♦ Type of backlight such as CCFL or LED backlight
 - ♦ Considerations for EMI / EMC compliance
 - ♦ Charge pump circuitry requirement

Drive Circuit Design

- ✓ Design of glue logic in order to meet timing requirements, contrast adjustment & other parameters
- ✓ Additional factors that are considered are as follows
 - ♦ Use of CPLD to act as clock synthesizer
 - ♦ Semiconductor devices based supply switching circuitry
 - ♦ Calculation of termination resistor using simulation tools such as PSpice, IBIS model
- ✓ Design of passive Pi filter configuration for analog RGB inputs. Factors considered for this are as follows
 - ♦ Use of tools such as FilterPro to calculate values of passive components
 - ♦ Analysis of frequency response on PC based applications

Board Layout Design

- ✓ PCB layout design of critical signals like pixel_clk by using ground guarding on both sides of track
- ✓ Provision of ground shielding, wherever necessary
- ✓ Routing of RGB data line using different routing techniques for impedance matching



About Aftek

Aftek Limited is a full spectrum technology services company from India. Over last 20 years Aftek has gained significant exposure to variety of technologies. Rich technological capabilities, focused investments in Research & Development and industry exposure enables us to reach beyond the basic IT services to design and deliver projects, products and implement end-to-end solutions to customers in variety of industries. Our service spectrum covers key services as Hardware Development, Firmware Development, Embedded Systems, Application Development, Application Maintenance, and Testing Services.