

Exhibit-4

Function Description

1. General

The 17" TFT flat panel monitor is specified as a display peripheral with analog video signal and Intel digital inputs and 17" TFT LCD display. Horizontal scan range is 31 - 82 K Hz and the refresh range is 56 - 75 Hz. This scan range allows it to display resolution up to 1280*1024 non-interlaces at 75 Hz refresh rate. The image can be adjusted through OSD control. These adjustments can be stored in an onboard memory including 32 factory pre-set modes and 7 user definable modes.

2. Power supply

Main voltage : AC 90 - 264 V rms, 50 - 60 Hz
 power consumption : 42 W Max
 power indicator : LED (on: green, standby: amber, new mode: blinking green)
 Auto power Saving : EPA, Nutek, VESA DPMS

3. Input signal

Horizontal scan : 31 - 82 K Hz
 Vertical scan : 56 - 75 Hz
 Input signals

1. Signal input level
 - Video : 0.7 V_{p-p} linear / 75 ohms
 - Sync : H/H+V, V TTL level, composite sync, sync on green
2. Impedance
 - Video : Terminated with 75 ohms
 - Sync : Terminated with 2K2 ohms
3. Intel DVI Digital
 - Single channel TMDS signal

4. OSD (On Screen Display) function

Software control function via OSD/ Control
 -Adjustable functions :

MAIN CONTROLS
LANGUAGE
ADJUST POSITION
ADJUST SIZE
BRIGHTNESS & CONTRAST
VIDEO NOISE
ADJUST COLOR
OSD SETTINGS
PRODUCT INFORMATION
RESET TO FACTORY SETTINGS

INPUT SELECTION
CLOSE MAIN CONTROLS
MOVE SELECTION THEN ok

LANGUAGE : ENGLISH , ESPANOL , FRANCAIS ,
DEUTSCH , ITALIANO, JAPANESE

ADJUST POSITION : HORIZONTAL
VERTICAL

ADJUST SIZE : full screen, native mode, user settings.

BRIGHTNESS & CONTRAST : brightness and contrast adjustment.

VIDEO NOISE : Phase adjustment, Clock adjustment, Image optimization

ADJUST COLOR : original panel color , 9300K for general use ,
6500k for image management, user red green
blue adjust.

OSD POSITION : OSD H-position, OSD V-position

PRODUCT INFORMATION : show product information

RESET TO FACTORY SETTING: recall to Factory preset settings.

INPUT SELECTION : analog(D-sub), digital(DVI), analog(DVI)

5. LCD panel

Type : 17" LCD flat panel
Dimensions : 17" (43.2cm)
Pitch : 0.264 mm
Color pixel arrangement : R.G.B. vertical stripes
Display surface : low reflection, antiglare with hard coating
Number of color : 256 gray level (8 bits)
Backlight : CCFL edge light system
Active area (W*H) : 337*270 mm (17" diagonal)

6. Function block

Video Switch

- switch two analog input signals from D-sub or DVI-A.

Scaler (GM5020)

a.) ADC

- brightness control
- contrast control
- R.G.B. sub contrast control
- sample the input video signal according to its pixel rate to form a digital data for format converter

b.) TMDS

- decode 4 pairs of TMDS signals to get 8 bits R,G, B data and sync signals

c.) Format converter

- convert the data from ADC to a LCD panel acceptable data format

- zoom the input video to a full screen display

LVDS

- convert R, G, B data and sync data from scaler IC to panel

Microprocessor

- monitor the input horizontal and vertical sync signal to judge input video mode
- send the parameters to format converter IC according to the input mode
- process the control data listed in OSD section

Front panel switch control

- used by OSD function
- six push button (OSD confirm, up/down(brightness), right/left, auto)

Inverter

- accept +12 V DC voltage
- output 800 Vrms AC voltage to CCFL (Cold Cathode Fluorescent Tube, backlight)

Power supply

- AC adapter : the AC power input from 90 V AC to 264 V AC, can generate 12V / 5A AC power
- DC DC converter : convert 12 V to 5 V , 3.3 V to system

USB function

- device function: one up stream port
- hub function : one upstream port, four down stream ports.