

NM-DSP-7544

6 X 8 MULTI FUNCTION DISPLAY

FEATURES

- TFT- LCD display
- Display area: 210.8 X 157.4mm
- Resolution: 1024 X 768 pixels
- More than 16 M colors
- Redundant LED backlight
- Ambient light sensor for automatic brightness adjustment
- Supports Portrait and Landscape mode
- Video overlay
- Bezel soft keys to provide application flexibility
- Built-in-test (POST, BIT, CBIT)
- Heater (Optional)
- NVG Compatible (Optional)

APPLICATIONS

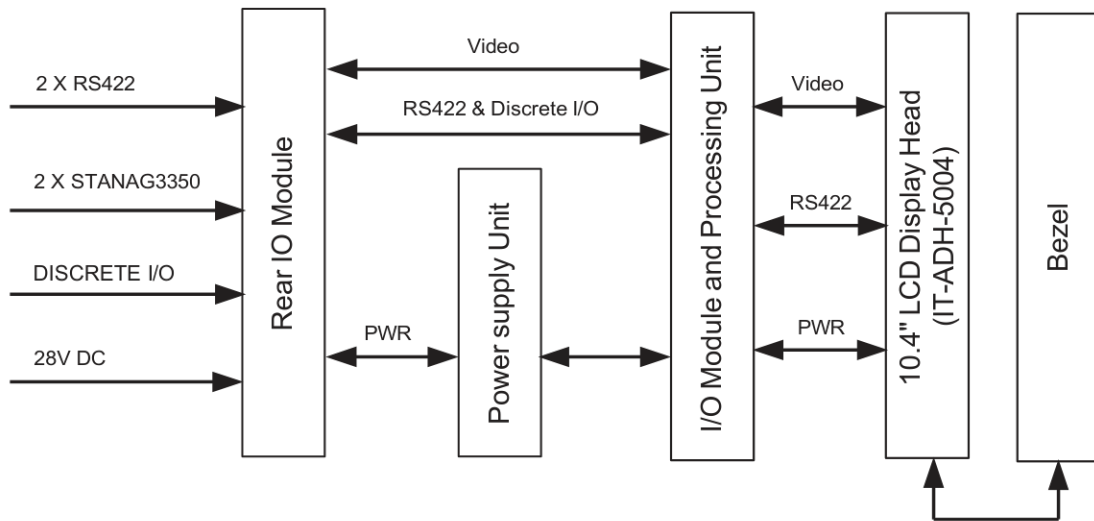
- Aircraft Cockpit applications

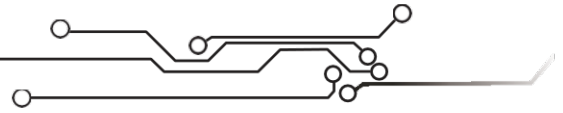


DESCRIPTION

NM-DSP-7544 is a AMLCD based Multi function Display (MFD) designed for aircraft cockpit applications. It supports both internal graphics generation and video display. It can present data on multiple windows with high quality of graphics, video and video with overlaid graphics. It supports wide variety of video inputs such as STANG3350, Y/C, ARINC818, DVI and analog / digital interfaces like RS422, MIL1553B, ARINC429 and discrete signals. Bezel soft keys of MFD provides flexibility to customize. MFD is compatible to MIL-STD-3009 class B in NVG mode and automated heater operation helps instant warm up and improves the display performance at temperatures below 0°C High quality of electronics, mechanical and optical components ensure the high reliability.

BLOCK DIAGRAM OF NM-DSP-7544





## SPECIFICATIONS

### OPTICAL

- Panel type : Color TFT LCD
- Display Area : 210.8mm X 157.5mm
- Pixel Arrangement : RGB Vertical Strip
- Resolution : 1024 X 768 Pixels
- Number of Colors : 16.2 Million Colors
- Back light type : LED Back light
- Brightness Range (white page) : 0.05 to 220 fL
- Brightness variation : <25% over the display surface
- Contrast Ratio : 500:1 at Dark Ambient  
3:1 at 10,000 fc
- Viewing Angle : Horizontal : ±60°, Vertical : ±60°

### MECHANICAL

- Weight in Kilogram : <6 Kg
- Surface finish : Conductive Chromatin and Polyurethane finish
- Cooling method : Cooling by conduction and convection

### USER INTERFACE

- User interface : Customizable bezel

### PERFORMANCE

- Warm from -40°C (With Heater) : <1 Minute (Functional)  
<5 minutes (Full performance)

### INTERFACE

- Video interfaces : STANAG3350B  
: Y/C (Optional)  
: DVI (Optional)  
: ARINC818 (Optional)
- Communication interfaces : RS422  
: ARINC429 (Optional)  
: MIL 1553B (Optional)
- Discrete I/O
- Input Voltage : 28 V DC
- Connectors : MIL-C-38999 connector series III

### EMI / EMC

- EMI / EMC standard : Comply to MIL-STD-461C

### ENVIRONMENT

- Environmental standard : Comply to MIL-STD-810E
- Operating temperature : -50°C to +90°C (With Heater)
- Storage temperature : -55°C to +100°C (With Heater)

### ORDERING INFORMATION

**NM-DSP-7544-X 0 0 0 0 0 0**

- 0 – No NVIS
- 3 – With NVIS
- 0 – No STANAG Input
- 3 – One STANAG Input
- 6 – Two STANAG Input
- 0 – No Y/C Input
- 3 – One Y/C Input
- 6 – Two Y/C Input
- 0 – No ARINC818 Input
- 3 – One ARINC818 Input
- 6 – Two ARINC818 Input
- 0 – No DVI
- 3 – One DVI Input
- 6 – Two DVI Input
- 0 – No Smart Options
- 3 – Smart Options
- 0 – Reserved
- 6 – Rugged
- 3 – Lab version