

## MICROOLED Microdisplay-P03

Low voltage technology, excellent image quality & high definition

### 0.39 Inches with 1044x788 Resolution (3.3M dots)

The MICROOLED MDP03 Microdisplay out performs the competition in picture quality, low power consumption and compactness.



**microoled**

### FEATURES

- Excellent Picture Quality
  - Unique Pixel design with 4 sub-pixels (no black matrix) for the brightest images
  - High brightness up to 400 cd/m<sup>2</sup>
  - Consistent contrast/color over a wide viewing angle even with wide FOV optics
- Superior Performance
  - Very High Uniformity (>96%)
  - Response times well below 1 millisecond for fast moving objects
  - Unique auto-adjusting display for constant luminance
  - Optimized power consumption for extended battery life

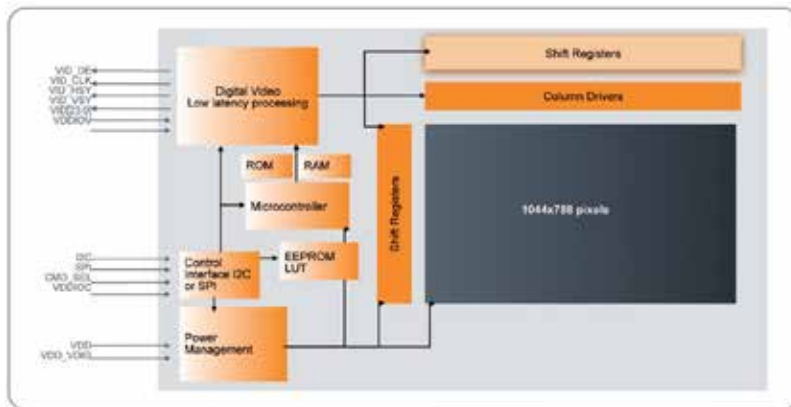
### APPLICATIONS

- Defense
- Security
- Sporting

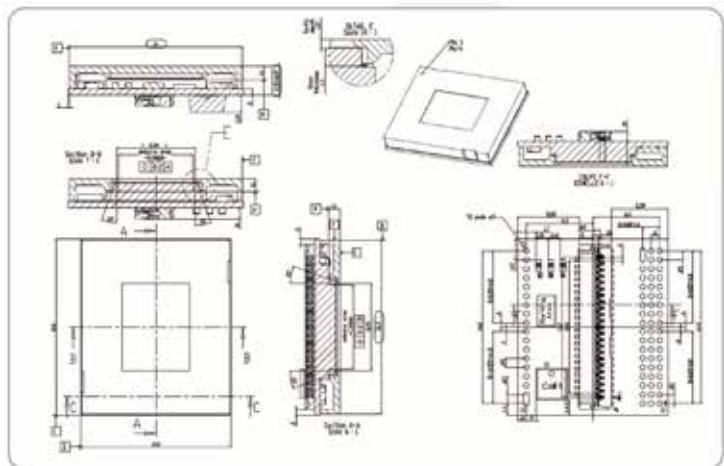
## MDP03 SPECIFICATIONS

<b>RESOLUTION</b>	1024 x 768 (XGA)
<b>PIXEL SIZE</b>	7.6µm x 7.6µm (sub-pixel 3.8µm x 3.8µm)
<b>ACTIVE AREA</b>	7.93 mm x 5.99 mm / 0.39" diagonal
<b>LUMINANCE</b>	Full color RGBWhite : up to 400cd/m <sup>2</sup> ; 117fL
<b>CONTRAST</b>	Typical 10,000:1
<b>VIDEO INTERFACE</b>	Standard digital video interface (RGB 4:4:4, YCbCr 4:2:2)
<b>FRAME RATE</b>	24 to 120 frames per second
<b>CONTROL INTERFACE</b>	I <sup>2</sup> C, SPI
<b>NON VOLATILE MEMORY</b>	Embedded non-linear gamma correction and product traceability data
<b>VIDEO PROCESSING</b>	Embedded video processing for a perfect image quality and straightforward system integration
<b>TEMPERATURE SENSOR</b>	Embedded automatic temperature compensation based on a digital sensor in order to keep constant luminance
<b>OPERATING VOLTAGE</b>	Two modes available: - Single supply mode = 2.5V - Li-Ion battery compatible - Dual supply mode = 2.5V - Li-Ion battery compatible and 1.8V (for lowest power consumption)
<b>VOLTAGE REGULATOR</b>	Voltage regulators and programmable negative cathode voltage generator embedded
<b>POWER CONSUMPTION</b>	200mW in typical video mode
<b>OPERATING TEMPERATURE</b>	-20°C to 50°C
<b>STORAGE TEMPERATURE</b>	-30°C to 70°C
<b>EVALUATION KIT</b>	- Evaluation kit available: reference = MDP03EK3 - Stand alone driver kit

**Block Diagram**



**Mechanical Diagram**



**For additional information:**  
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