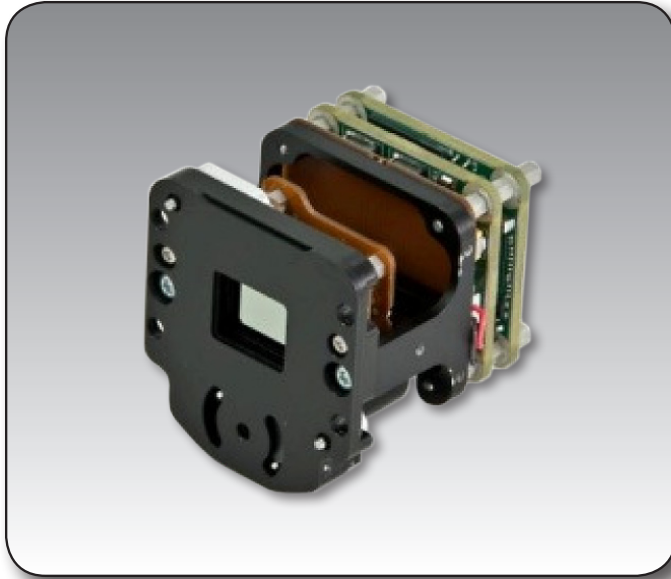




NanoCore® 640 Infrared Core 640x480 Focal Plane Array



NANOCORE® 640 FEATURES:

- Small size, light weight, and low power
- 17µm pitch Focal Plane Array
- Two channels of digital video operating simultaneously
- Two serial interfaces for communication & control; RS-232 and USB
- Two discrete inputs, programmable
- Electronics Zoom, 1x – 8x
- 30Hz frame rate
- Auto-Close shutter when camera is off
- Field – Upgradeable Software
- Advanced Graphical User Interface (GUI) for camera control and setup

NANOCORE® USER INTERFACE:

- Common electronics interface for NanoCore 320, 640, and 1024 – for direct compatibility or upgrade in the NanoCore series
- Common mechanical Interfaces for lens and mounting facilitates individual user integration
- Single 80 pin connector for ease of integration with individual users' system electronics
- Additionally, custom optical, mechanical, and system electronics can be provided by L-3 to users' specifications
- NanoCore "M" includes electronics for video formats and input power range, and available with choice of optics



Warrior Systems

NANOCORE® 640 INFRARED CORE



		NanoCore 640	NanoCore 640M (20° shown)		
		5000979-1	5000978-3	5000978-1	5000978-2
INFRARED	FPA Type	Uncooled a-Si Microbolometer			
	FPA Resolution	640 x 480			
	FPA pixel pitch	17µm			
	Spectral Band	LWIR			
	Sensitivity	< 40 mK (with f/1.0 optic)			
	Frame Rate	30Hz			
OPTICS	Focal Length	None	45mm	11mm	5mm
	FOV (Horiz x Vert.)	N/A	14° x 10°	28° x 21°	57° x 43°
	F/#	N/A	f/1.2	f/1.0	f/1.0
	Lens Type	N/A	Atherm Manual focus	Atherm Manual focus	Atherm Manual focus
	Waterproof	N/A	IP68	IP68	IP68
PERFORMANCE	Size (WxHxL)	1.5" x 1.5" x 1.5"	2.2" x 2.2" x 4.2"	2.0" x 2.0" x 3.7"	1.8" x 1.8" x 3.7"
	Weight	52 g	233 g	210 g	194 g
	Power	<1.1 Watt	< 1.4 Watts		
FEATURES	Power input	3.3 Vdc	5 – 28 Vdc		
	Digital Outputs	2 Channels Simultaneously			
	Ch.1 Depth; Format	8/16/24bit; Parallel	8/16/24bit; CameraLink™		
	Ch.1 Depth; Format	8bit; BT.656	8bit; NTSC		
	Turn on time	<3 sec			
	Electronic Zoom	1x – 4x (0.25x step) and 4x - 8x (1x step)			
	Image Processing	Histogram or AGC			
	Polarity	Black Hot or White Hot			
	Touch-up	Automatic (Programmable) or Manual			
	Serial Comm.	RS-232 or USB 2.0 Full-Speed			
ENVIRONMENT	Discrete I/O	2 inputs (programmable)			
	Temperature, Operating	- 40° C to +85° C			
	Temperature, Storage	-45° C to +105° C			
	Mechanical Shock	20g (11ms) and 500g (0.4ms)			
	Mechanical Vibration	4.3G (20Hz to 2000Hz)			
	Humidity	5% - 95% RH (non-condense)			

Specifications are approximate and subject to change without notice.

NanoCore 640 June 2012



Approved for public release DoD Ref: TBD.
 Export of this product is regulated by the U.S. Department of State in accordance with guidelines of "International Traffic Arms Regulations (ITAR)" per Title 22, Code of Federal Regulations, Parts 120-130.
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