# **NEON Series: Smart Camera and Embedded Vision Systems**

# Ready-to-Go, High-Performing and Ruggedized Solutions with Built-in FPGA and GPU Co-Processors

Machine vision capabilities are being widely adopted for automatic inspection in industrial production environments, for improved quality, reliability, stability, consistency, and efficiency over conventional visual inspection by operators. To gain wide adoption machine vision systems should be compact, high-performing, easy to use and should operate reliably in harsh environments.

ADLINK's new generation x86 NEON Smart Camera product portfolio features 4MP 60fps global shutter sensor and the Intel® Atom™ quad core 1.9 GHz processor, featuring minimal footprint and rugged IP67-rated construction. The quad core CPU increases computing power and FPGA coprocessors and GPU deliver advanced image processing. Rich software support and API compatibility enable easy migration from original x86 platforms, eliminating software and development language burdens across the platform, reducing time to market.

## Target Markets

- > Process control/automation
- > Security
- > Robotics
- > Medical
- > Retail
- > Automotive





#### Features of the NEON Smart Camera Series

The NEON-1040/1021/1020 feature global shutter image sensors (sensor resolutions of 2MP and 4MP), and PWM lighting control support. Rugged construction with IP67-rated housing and M12 connectors enables the NEON Series to withstand the harshest industrial environments.

#### Key features include:

- > Quad core Intel® Atom™ processors E3845 1.91GHz
- > VGA output, max. 2048×1152 at 60 Hz
- > Global shutter CMOS sensors available
- > 4MP 60 fps (NEON-1040), 2MP 120 fps (NEON-1020) and 2MP 60 fps (NEON-1021) resolution
- > 4 GB DDR3L RAM, 16 GB and 32 GB SSD Storage
- > IP67-rated housing and M12 connectors
- > Additional GigE Vision 1 slave camera support
- > GeniCam, GenTL, and Open CV compatible with image acquisition
- > Built-in PWM lighting control
- > 4× digital input and 4× digital output and USB 2.0 and RS-232 ports
- > Flexible software support with MVTec HALCON, MVTec MERLIC, COGNEX VisionPro, and many others
- > Starter kits available for NEON-1020/1040 versions



## **Product Specifications**

Model Name	NEON-1021	NEON-1020	NEON-1040
Image Sensor	e2v EV76C570	CMOSIS CMV2000	CMOSIS CMV4000
Resolution	1600×1200	2048 × 1088	2048 × 2048
Pixel Size (µm)	4.5	5.5	
Frame Rate (fps)	60	120	60

### **Ordering Information**

Part numbers and more information available on request

#### In Person

Please contact your local Arrow account manager or 855 3264757

#### **Online**

www.arrow.com/loT



