ONBOARD

PROPHESEE REFERENCE SYSTEM

PROPHESEE

METAVISION FOR MACHINES

ONBOARD PROPHESEE REFERENCE SYSTEM

ONBOARD IS A FLEXIBLE REFERENCE SYSTEM THAT BRINGS THE POWER OF PROPHESEE'S HIGH-SPEED AND ROBUST VISION TO SERVE YOUR APPLICATION IN RAPID PRESENCE AND OBJECT DETECTION, OBJECT TRACKING AND INSPECTION.

THE FIRST
EVENT-BASED VISION SYSTEM
WITH NEUROMORPHIC ALGORITHMS

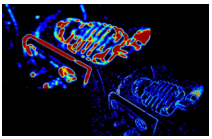
VGA event-based camera
System latency below 10ms
IMU
Wide connectivity
Quad-core @1.5GHz
On-board programming
MIPI CSI-2 interface

APPLICATIONS

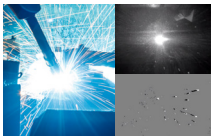
Area Monitoring
for better productivity

High-speed Counting
for higher throughput

Vibration Measurement
for predictive maintenance



Real-time Inspection
for arc welding monitoring



HIGHLIGHTS

- Integrates the NEW Prophesee 3rd generation VGA CIS camera module into a powerful reference vision system based upon the industry standard Qualcomm® Snapdragon™
- High speed event-based vision usage assembled with Linux
- Comprehensive connectivity including Ethernet, USB,WI-FI and more for versatile system integration

METAVISON ALGORITHMS

Tracking	Max Object speed	2500px/s
	Average accuracy	<1 pixel
Object Counting	Maximum throughput	1000 obj/s
	Accuracy	> 99.5%
Vibration Measurement	Minimal amplitude detection	1 pixel
	Maximum frequency detection	> 1000 Hz
Kinematic Monitoring	Motion period irregularity detection	1%
	Motion amplitude defficiency detection	1 pixel

CHARACTERISTICS

MECHANIC	
Size	13.5cm x 8.5cm x 3.1cm
Weight	250g
Power Supply	12V DC-in

NEW PROPHESEE SENSOR	
Array Size Pixel	640 x 480
Pitch Optical	15 µm
Format	3/4"
CONTRAST DETECTION	
SNRmax	38 dB
Dynamic Range	>120 dB
Low Light Cutoff	<1 lux
Temporal Resolution	100 µs

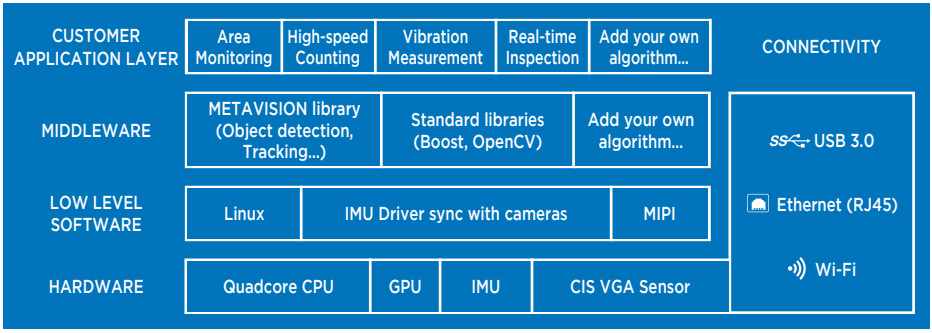
OPTIC	
D-FOV	70°
MOUNT	C

ADD. SENSORS	
IMU	6 axis

PROCESSING	
CPU	Quad core @1.5GHz
RAM	3GB LPDDR3
eMMC	16 GB

CONNECTIVITY	
USB	3.0 OTG
Ethernet	Gigabit RJ45
Wireless	Wi-Fi 802.11ac

STACK DIAGRAM



PROPHESEE

METAVISION FOR MACHINES

Prophesee (formerly Chronocam) is the inventor of the world's most advanced neuromorphic vision system.

Its patented technology breakthrough introduces a new computer vision paradigm based on how the human eye and brain work to dramatically improve the efficiency and intelligence of video processing.

More information at *www.prophesee.ai/onboard*
or contact us at *sales@prophesee.ai*