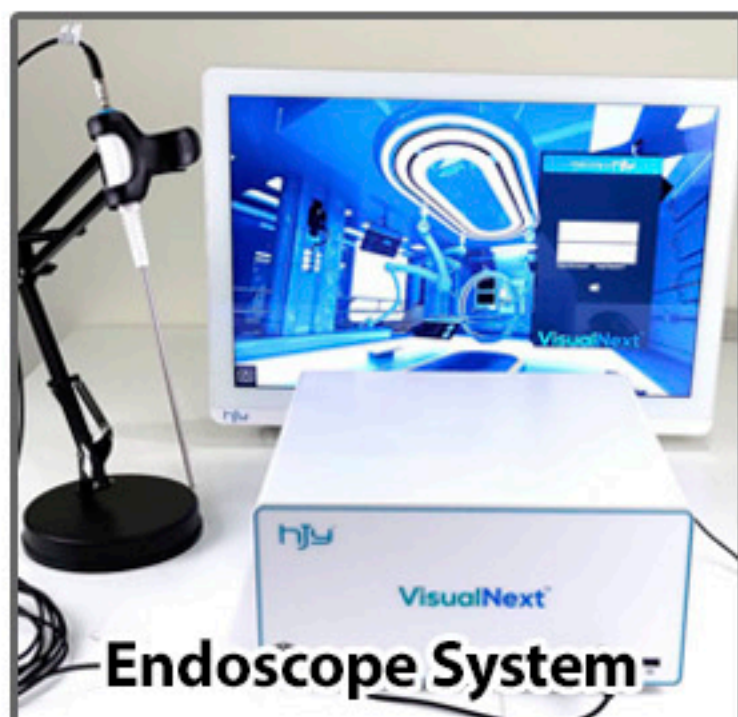# Pervasive Intelligences Heterogeneous Integration

CES will take place in Las Vegas, and Etron Tech Group would like to invite you to attend. CES is the most influential tech event in the world — the proving ground for breakthrough technologies and global innovators. Etron uses IC products to fulfill "Pervasive Intelligences Heterogeneous Integration" which endows electronic products with AI that provide the capabilities of brains, eyes, nerves, and privacy. All to develop innovative products and enrich life values.

Smart Medical for Human Live

Endoscope System · Touchless · 3D Reconstruction

eSP777 - Dual Fisheye Lenses 3K2K Stereo Dewarp/Stitch Processor
● Dewarping
● Large FoV
● High Resolution
● Stereo Rx Input

eSP777, the 3K2K Stereo Dewarp/Stitch Processor with embedded KGD DRAM buffer, supports 180-degree de-warping and correction, accelerates AI inference at the edge, and achieves image refinement. It stitches 1080p 3D depth maps and scenes. With wired or wireless transmission, the 3D point cloud character or object can be reproduced remotely as a virtual 3D holographic image, which can be used for augmented reality (AR) and 3D reconstructed scenes. It is a good solution, mainly because it is cost-effective in nature.

Robot / AMR for Human Energy

3D Eye-in-Robot · Unmanned AGV · AMR

G100⁺ - High Precision Single-Chip Real-Time 3D Depth-Map Camera
● Real-time and High FPS
● 95° Diagonal Field of View
● Spatial Information for Detection & Avoidance

Depth camera G100⁺ is part of the global shutter series of cameras. The latest depth sensing hardware and software package creates plug-and-play integration experiences. Perfect for developers and innovators wanting to pack depth sensing to their devices. On-chip Depth Generation up to 60 FPS with outstanding precision and accuracy performances. Generate depth resolution up to 720p with horizontal FoV of 95° and vertical FoV of 63°. Empower your system with spatial context when running machine-learning or AI algorithm functions, taking your product development to the next level.
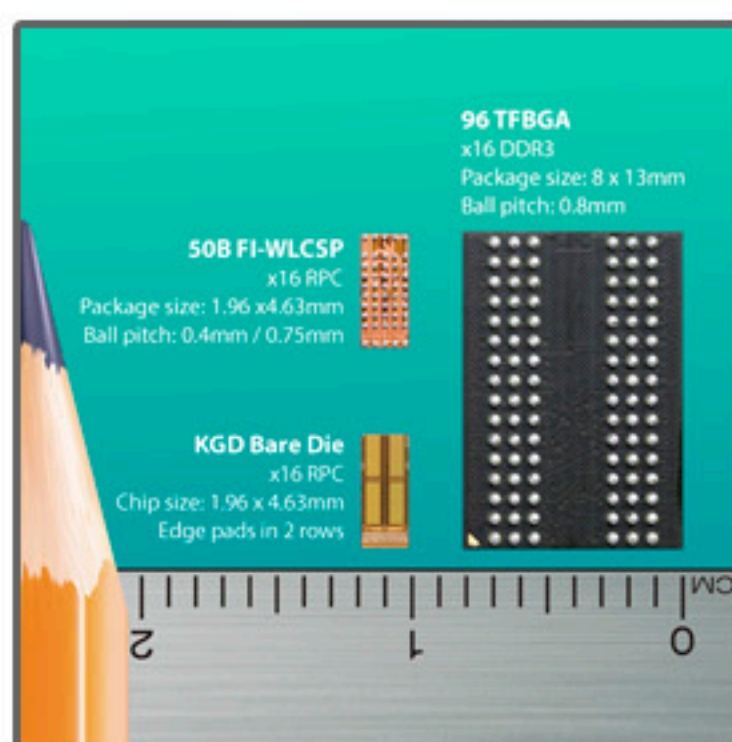
Super High Speed Transmission for Human Communication

USB Power Delivery Controller · Cable (eMarker) · Video Communication Processor

USB Controller for Super High Speed Transmission

Specializing in high speed transfer interface as core technology, develops IC solutions for USB Type-C and Thunderbolt high-speed transmission interfaces, including: USB Host Controller ICs, USB Type-C Function (CC+MUX) Controller ICs, eMarker ICs, USB Power Delivery Controller ICs, USB Audio/Video Capture Controller ICs, etc.
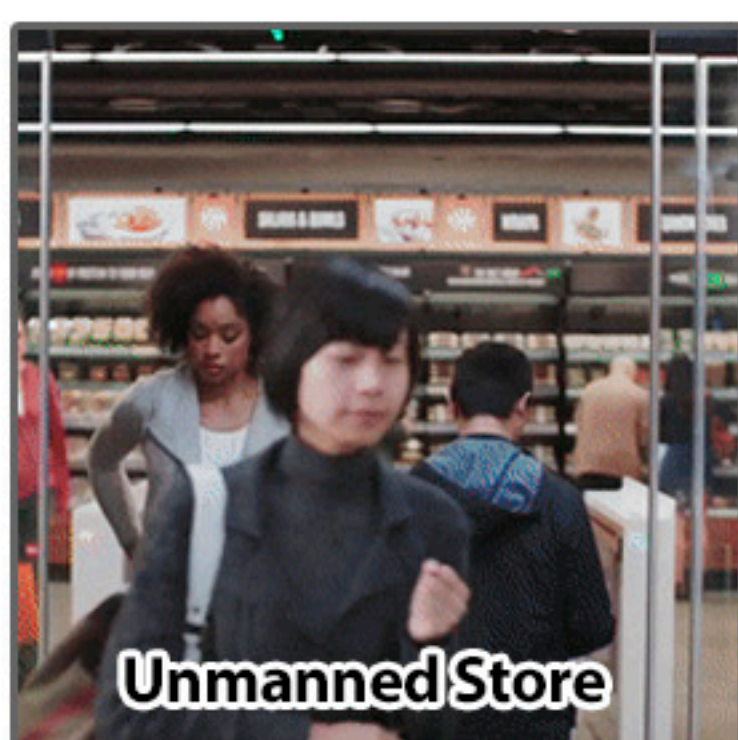
Smart Memory for Human Life

Innovative/ Enduring Memories with Longevity Support

Smart Memories – Ranging from Application-Driven Buffer Memory, Known-Good-Die Memory (KGDM), & Innovative DRAM Solutions
● JEDEC Standard Compliant
● Automotive Qual AEC-Q100 Level 2
● Longevity Supply >10 years
● Broad Product Lineup
● Excellent Quality and Reliability
● Low Power and Small Form Factor

Etron is Your Trusted Supplier for Innovative / Enduring Memories. The longevity support is a key consideration for semiconductor supply chain resilience. Etron's Memories provide benefits of longevity support, broad product lineup, excellent quality/reliability, low power and small form factor. Etron offers Innovative RPC DRAM® and Enduring Memories covering SDR, DDR, DDR2, DDR3, DDR4, LPDDR2, LPDDR4 SDRAM and SPI NAND with densities ranging from 16Mb to 8Gb. We will demonstrate our Innovative RPC DRAM, Enduring DRAMs with longevity support and adopted to the latest applications including WiFi-6 router, AI Speaker, and Automotive platforms, etc. at CES 2023.
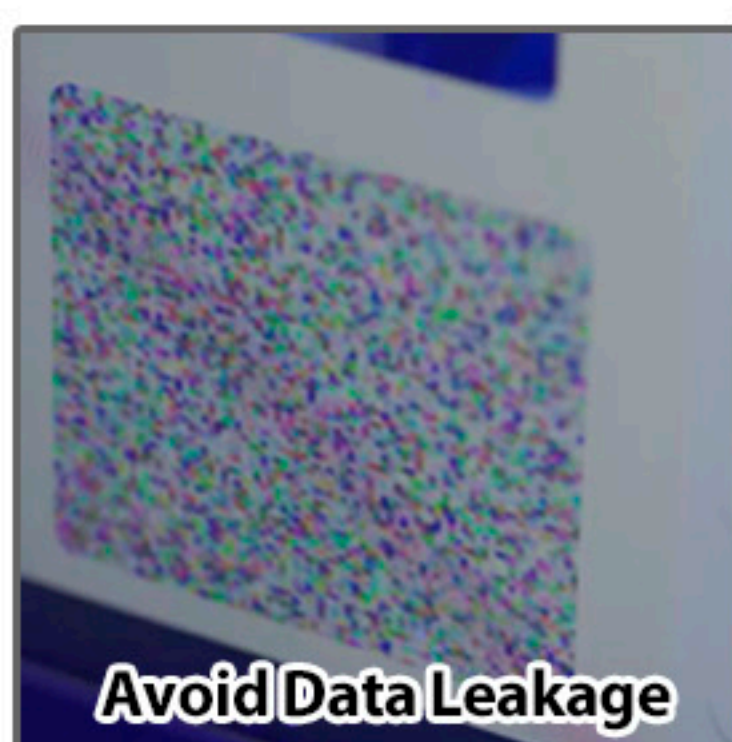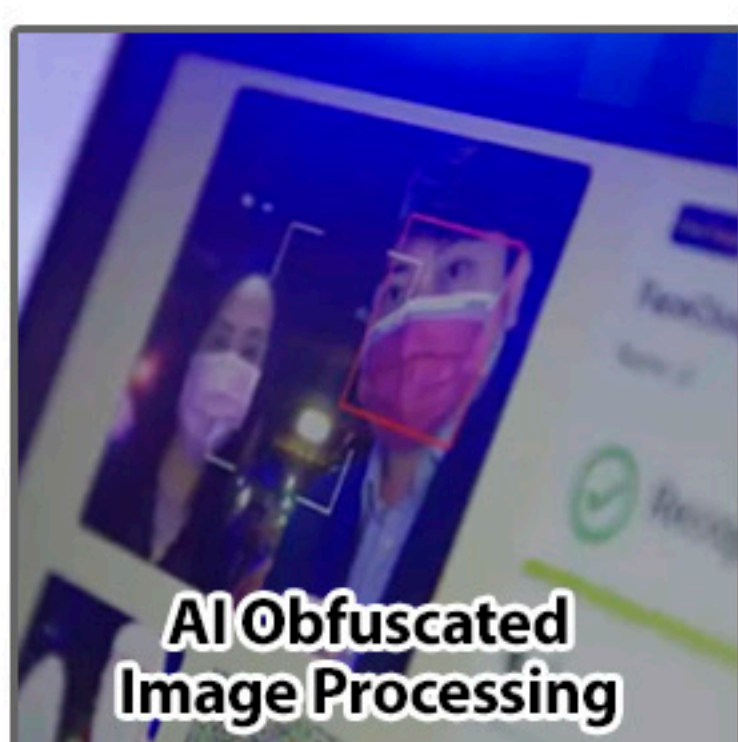
Smart Retail for Human Convenience

Unmanned Store · Object Capture · People & Thing Counting

eSP876 - 3D Real-Time Depth-Map Camera Module & IC Platform
● Proprietary 3D Capture Technology
● High Quality
● High Transmission Rate
● Low Power

An exciting application addressed by the eSP876 is smart retail. The eSP876 3D Depth-Map Control IC can precisely execute multi-format data capturing. The intelligent camera, 3D depth-map technology, people/object counting algorithms, and core image processing techniques. The eSP876 platform can provide valuable data in capturing customer behavior accurately, letting Computer vision and Embedded computation forever change how people interact and experience retail.

Differential Privacy for Information Security

AI Obfuscated Image Processing · Facial Recognition · Avoid Data Leakage

DeCloakFace - Trustable AI Obfuscated Image Processing Technology for Facial Recognition
● ＞99% Recognition Accuracy
● Accelerated via Cloud / Edge Computing
● High Speed AI Training
● One-Shot Image Face Registration
● Upload only Obfuscated Images & No Raw Facial Images

DeCloakFace is a trustable AI obfuscated image processing technology for facial recognition, which allows users to conduct secure identity verification without leaking individual privacy. It is accelerated via cloud or edge computing for high efficiency and requires no hardware key. DeCloakFace provides privacy protected identity authentication that image processing is done at local devices only so that no sensitive personal facial photos will be uploaded to cloud to avoid data leakage. The innovative solution has brought a great deal of attention from industries including: finance, healthcare, cryptocurrency and E-signing platforms, where ensuring privacy while collecting data is crucial.

Etron along with its subsidiary corporations pivots off IC subsystems to present AI enabled solutions of computer vision applications, revolving around robotics, automation, and computerization. We invite you to visit our booth.

Please Click here to make an appointment for a business meeting at the 2023 CES