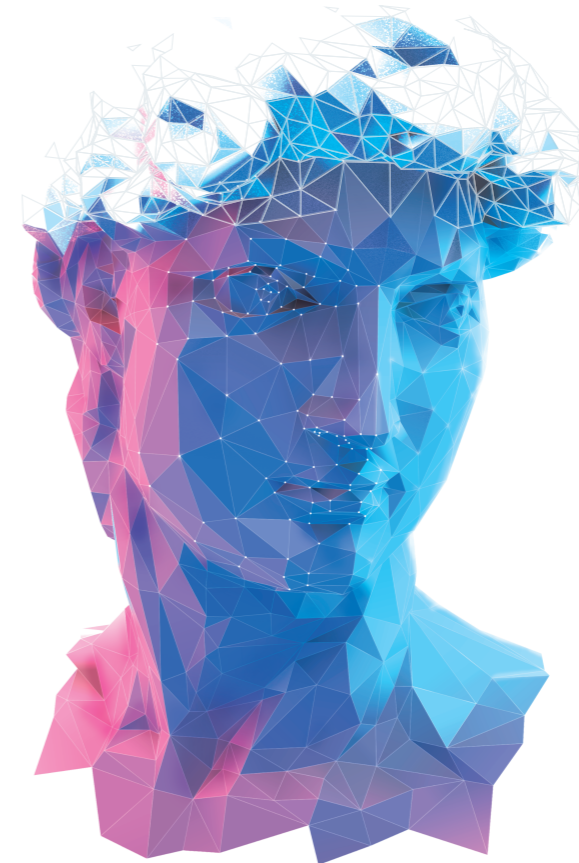




ARTILUX[®]

new intelligence with new dimensions



ARTILUX[®]
E X P L O R E

Wide Spectrum 3D ToF Sensor



 LinkedIn



 website



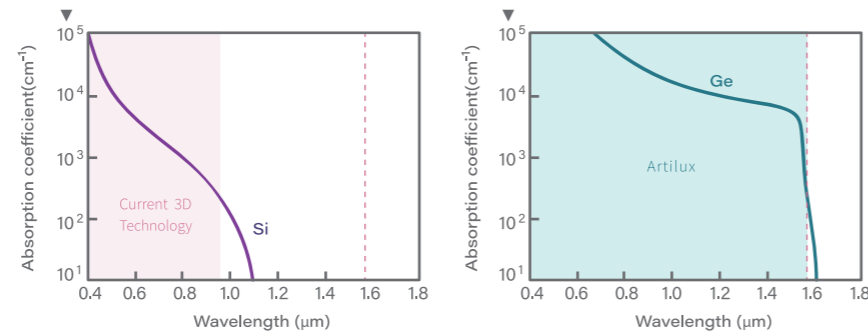
info@artiluxtech.com



• Hsinchu • Menlo Park • Shenzhen

The game-changing GeSi photonics technology for wide spectrum 3D TOF sensor

With fundamental breakthroughs from material to system engineering, Artilux redefines the performance of TOF (Time-of-Flight) 3D imaging by leveraging the unique features of wide spectrum absorption in NIR (Near Infrared).



Through the integration of GeSi (Germanium-on-Silicon) as the light absorption material with CMOS technology on silicon wafer, Artilux has successfully extended the available sensing spectrum up to 1550nm. This disruptive technology platform was developed in collaboration with TSMC, thereby ensuring the sensor quality and reliability in the production stage.

With better performance at a long wavelength in NIR, the GeSi-based wide spectrum 3D TOF sensor ushers in a new era of 3D imaging with multiple advantages over other available Si-based solutions.



	wide spectrum GeSi 3D imaging	Conventional Si 3D imaging
Wavelength	850nm to 1550nm	850nm to 940nm
QE (quantum efficiency)	70% 940nm 50% 1310nm	35% 940nm 0% 1310nm

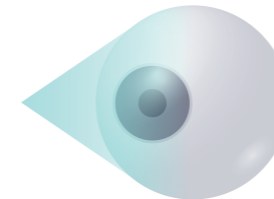
* QE refers to the percentage of input photons absorbed by a sensor and then converted to output electrons, usually applied to measure a sensor's response to incoming light.

👁️ QR code to the demo video



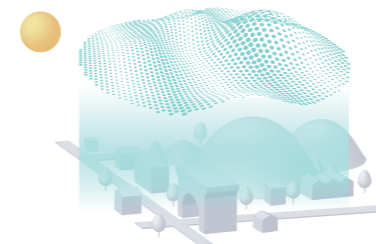
👁️ Eye Safety

The GeSi photonics technology greatly reduces the risk of eye hazard because longer wavelength in NIR radiation is much safer to the retina.



👁️ Minimum Sunlight Interference

Artilux Explore Series is able to diminish the interference from sunlight thus enabling consistent indoor-outdoor sensing performance.



Artilux Explore Series is the world's first wide spectrum 3D sensor based on GeSi photonics technology, featuring improved eye safety, lower sunlight interference and exceptional depth accuracy.

ARTILUX®
E X P L O R E

👁️ High Accuracy

Combined with the high modulation frequency and high QE, the wide spectrum 3D TOF sensor delivers noticeably superior depth accuracy.

