JABIL OPTICS

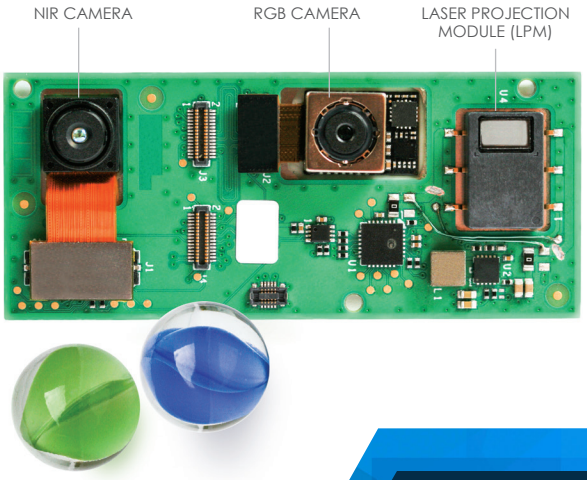
3D SENSING MODULE

LASER PROJECTION MODULE

- Z-height < 4.8mm
- Footprint < 9 x 14 mm
- Field of View coded pattern = 60°
- Aspect Ratio FoV = 4:3
- Laser Wavelength: λ = 825 nm
- Optical Output Power = 0.7 mW (Eye safety power subtened by 7mm aperture at 10 cm) Total optical power = 150 mW

NEAR INFRA-RED (NIR) MONOCHROME CAMERA

- Z-height < 5 mm
- Monochrome Sensor = 4 MP
- Image Sensor = OV 4188
- FoV = 60° horizontal
- F2.2 Lens Fixed Focus
- 30 fps
- NIR Power = 280 mW



3D SENSING MODULE

- Optimized for minimum power consumption
- Operating Range: 0.4 to 2.5 m
- Hardware Synchronization

PERFORMANCE

- Depth resolution (z-axis) = 0.4 mm @0.5 m, 6.4 mm @2m
- Depth map size (x,y spatial) = 432 x 324 (raw, e.g. no interpolation or up-sampling)
- Spatial resolution (x,y axis) = 0.5 cm @0.5 m, 2 cm @2

HOW IT WORKS

- Module generates a coded pattern NIR spectrum and projects into the scene
- Coded pattern is optimized for the Qualcomm Snapdragon™ 820 chipset and algorithm
- Designed for easy integration into mobile devices
- Design ready for high volume manufacturing
- Enables high precision 3D mapping for ultra-high resolution images

USE CASES INCLUDE:

3D Scanning	Authentication
Security	Augmented Reality & Virtual Reality (AR/VR)

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