

Minor Product or Process Change Notification

PCN Title:

M0173 Front End Imager Unit Upgrade to M0226

Notification Date	Oct 15, 2026	Projected First Ship Date for Product	Nov 9, 2026
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Change Information

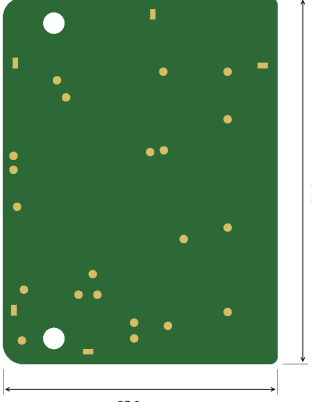
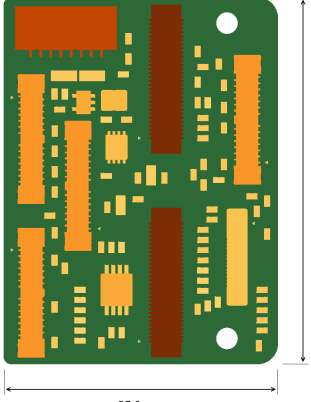
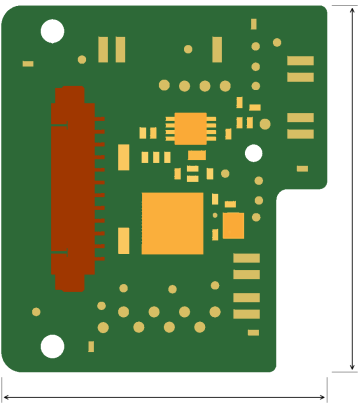
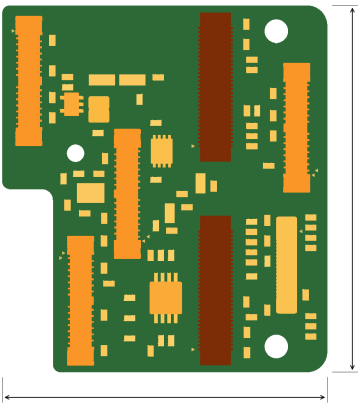
Description:

ModalAI is replacing the M0173 Starling Front End Imager Unit (including the M0173-2 variant) with the M0226 Front End Imager Unit. The M0226 mates to VOXL 2 camera groups J6 and J7 using the same Hirose DF40 60-pin, 4 mm connectors and the same camera group mapping, and supports the same sensors (IMX412, AR0144, PMD ToF). The M0226 adds VOXL 3 compatibility and new interfaces: a DPS368 barometer, an 8-pin FLIR Lepton carrier connector, a PCA9685 16-channel LED/PWM controller, a 12-pin gimbal head connector (LED bar, gimbal motor, laser pointer), a 4-pin MIPI switcher connector, and a 40-pin Molex SSRB front ToF connector (new format).

Mechanical comparison (measured from Rev A STEP models):

Dimension	M0173	M0226	Change
Board outline (W × L)	27.0 × 36.0 mm	32.0 × 36.0 mm, notch on lower right	+5.0 mm width
PCB thickness	1.0 mm	1.0 mm	None
Max component height, top	~0 mm (no top components)	3.4 mm	+3.4 mm
Max component height, bottom (VOXL side)	3.9 mm	3.9 mm	None
Total stack height	4.9 mm	8.3 mm	+3.4 mm
Mounting holes	2 × Ø2.2 mm, 31.0 mm pitch	2 × Ø2.4 mm, same positions; plus 1 × Ø1.8 mm	Enlarged 0.2 mm; 1 added

Before (M0173) and after (M0226) drawings. Bottom views are mirrored as seen from below.

M0173 top	M0173 bottom
M0173 Starling Front End (Rev A) — TOP  27.0 mm 36.0 mm	M0173 Starling Front End (Rev A) — BOTTOM (VOXL side, viewed from below)  27.0 mm 36.0 mm
M0226 top	M0226 bottom
M0226 Classic Imager Unit (Rev A-3) — TOP  32.0 mm 36.0 mm	M0226 Classic Imager Unit (Rev A-3) — BOTTOM (VOXL side, viewed from below)  32.0 mm 36.0 mm

Reason:

The M0226 consolidates the front end imager onto one board that supports both VOXL 2 and VOXL 3, and adds sensor and payload interfaces that previously required separate adapters.

Impact (form, fit, function, quality or reliability):

Form/Fit: The board is 5.0 mm wider and has 3.4 mm of top-side components (total height 8.3 mm vs 4.9 mm). Mounting holes are in the same positions but enlarged to

Ø2.4 mm. Customers with tight enclosures should verify clearance.

The J5 connector on the -3 and -4 versions of the M0226 is changed from the JST SM08B-SRSS-TB on the M0173 to the low-profile JST SM08B-SHLS-TF.

Function: Equivalent for existing camera configurations, with added features. The front ToF connection uses the same 40-pin connector; and retains compatibility with the existing M0177 flex. The M0226 adds:

- The ability to turn off the 25MHz clock signal to connector J5 in software
- Sync support on both high resolution camera ports
- A I2C Barometer
- Two or six PWM outputs via a molex picoblade connector (depending on stuffing option)

Minimum SDK version: SDK 1.8.0.

Quality/Reliability: No change expected.

Qualifications Plan and Data Availability

Qualification Plan:

ModalAI is committed to providing high quality products to our customers. The qualification of the M0226 adheres to the same stringent standards and procedures as those used for all ModalAI products, including the MCCA-M0226 validation test plan covering camera, ToF and interface functional tests on the VOXL 2 test target. Fit checks in each affected drone configuration are [in progress / complete].

Method of Identifying Changed Product

Details:

Visual identification is possible according to the changes described above: the M0226 is wider and has components on the top side. The part number changes from M0173 to M0226, as listed below.

Recommended Action for Customers

Details:

No action is required for customers using standard ModalAI camera configurations. Customers with custom mechanical integrations, custom ToF cabling, or pinned SDK versions should review the changes above and contact ModalAI for samples before [last

time buy date].

Affected Product(s) or Ordering Codes	
Part Number	New Part Number
MSA-M0173-2-01	MSA-M0226-[TBD]
MSA-M0173-2-02	MSA-M0226-[TBD]
MSA-M0173-2-03	MSA-M0226-[TBD]
MSA-M0173-2-04	MSA-M0226-[TBD]
MSA-M0173-1-04	MSA-M0226-[TBD]
MSU-M0173-2-01 to -04 / MDK-M0173-2-01 to -04	MSU/MDK-M0226-[TBD]
MSU-M0173-1-01 / MDK-M0173-1-01	MSU/MDK-M0226-[TBD]