

IQ

Mechanical Comparison Between Original And Updated (Ma2085) Camera

June 9, 2021

Top Level Assembly

Updated

Original

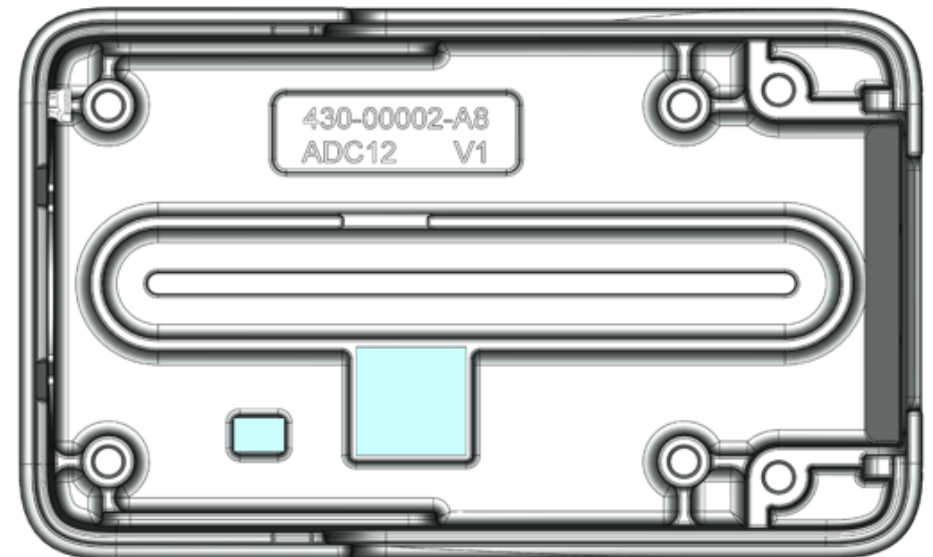
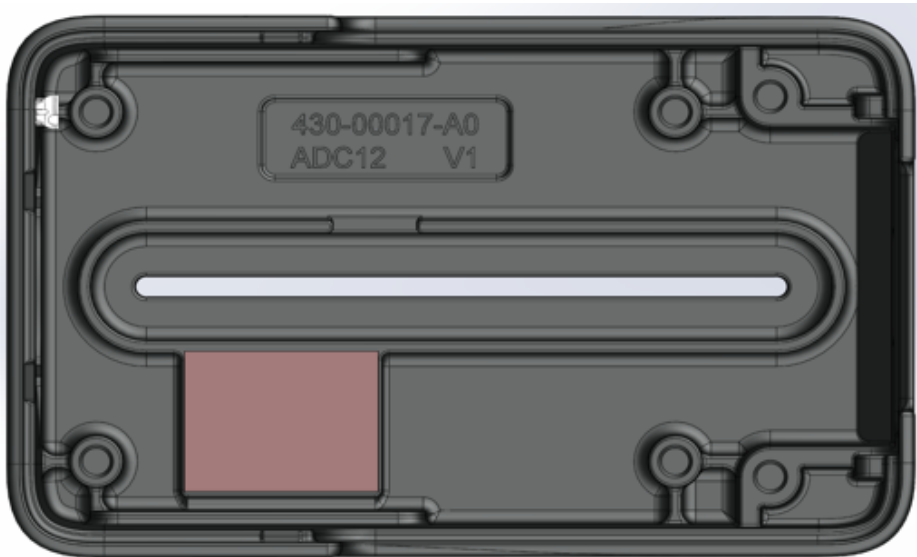


Identical Outer Geometry
Identical Electrical Interface And
Specs

Main Body

Updated

Original



Identical Outer Geometry

- Same Tooling Cavity

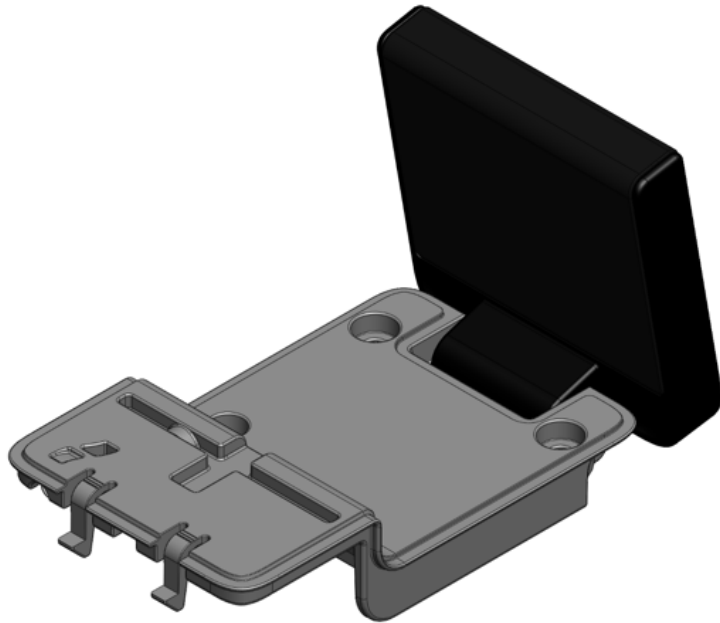
Same Material And Paint

Updated Internal Geometry

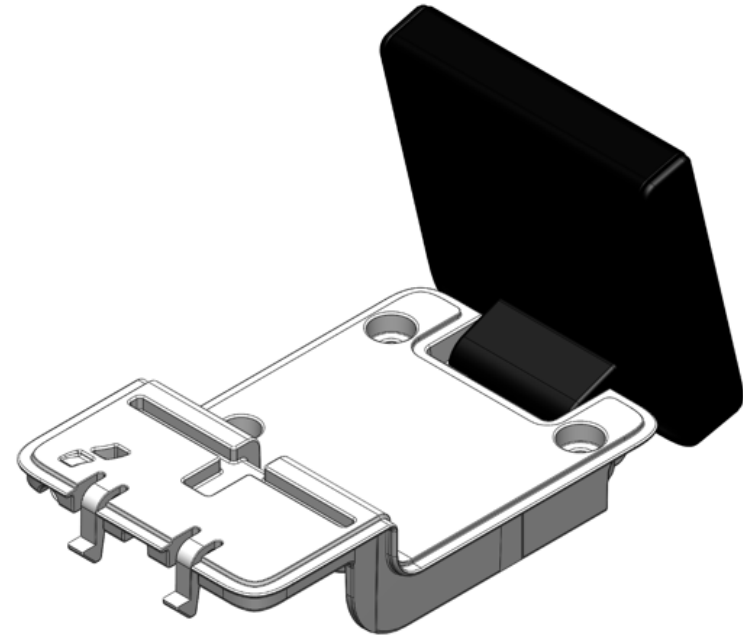
- Cooling Interface Size And Location
- Gap Pad Shape And Quantity
- Screw Tower Height

Foot Assembly

Updated



Original



Same Foot, Hinge And Foot Soft Cover
Same Interface Towards Main Body
Same Outer Geometry

- After Assembly Of Main Soft Cover

Updated Hard Cover (Details On Next Slide)

Hard Cover

Updated

Original

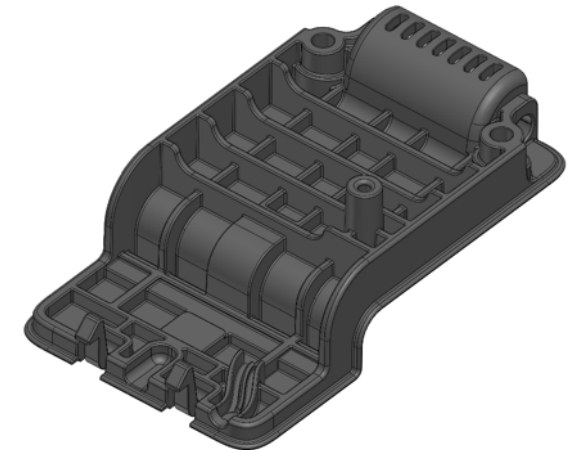
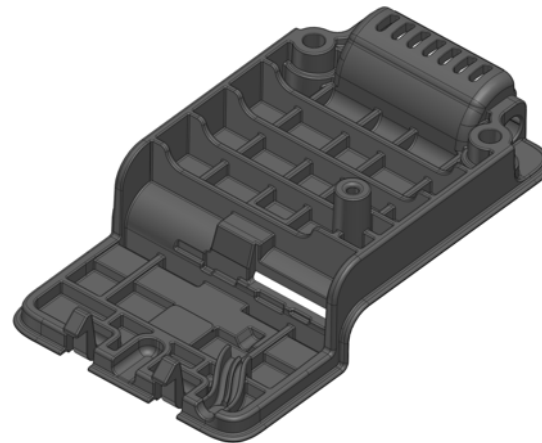
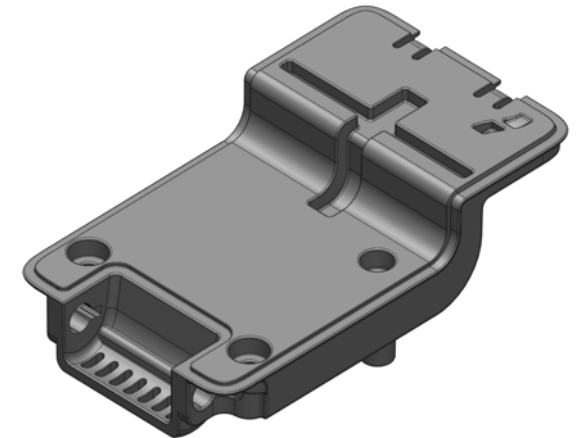
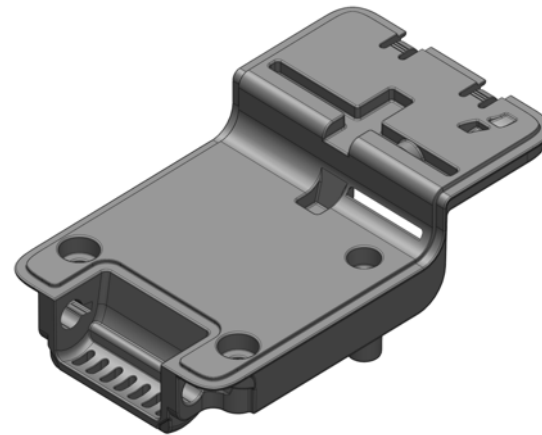
Same Material

- Flammability Rating
UL-94 V-1

Geometry Updates To Fit

Second Source Lens Module

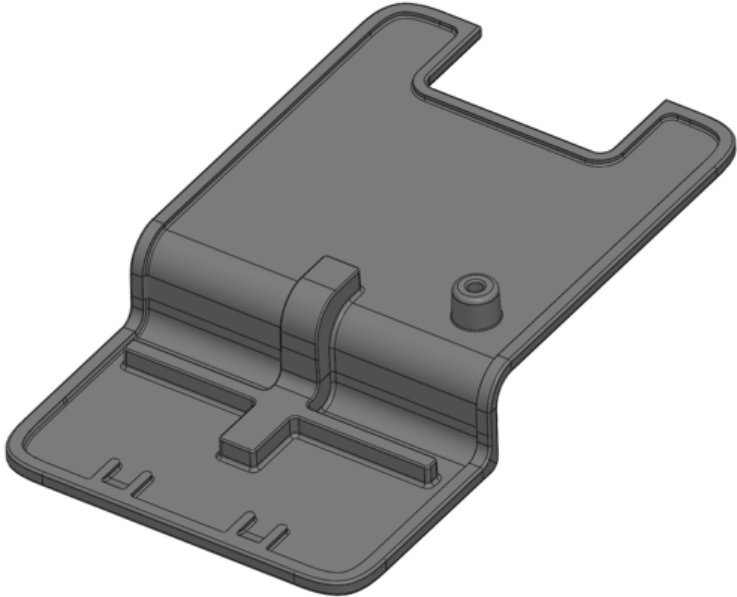
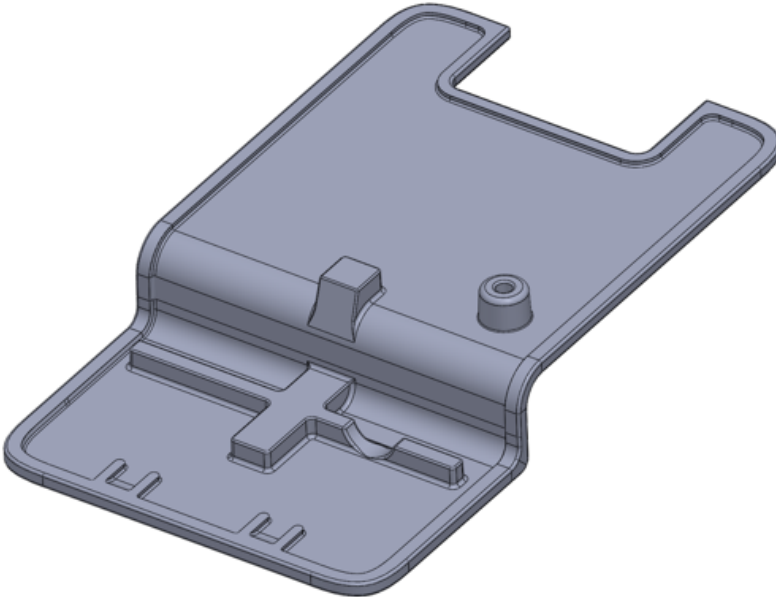
- Slot Through Part
(Covered By Soft Cover
In Final Assembly)
- Removed Material On
Side Walls
- Modified Interface
Towards Soft Cover



Soft Cover

Updated

Original



Same Material (UL-94 V-1)
Same Outer Geometry

Updated Interface Towards Hard Cover

Main PCB

Updated

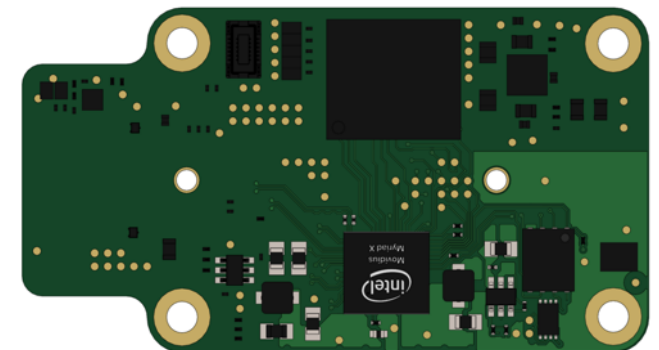
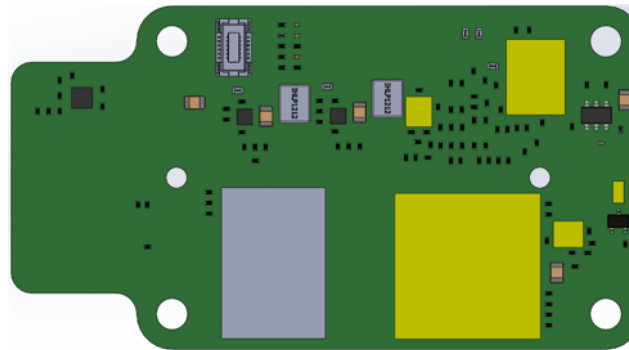
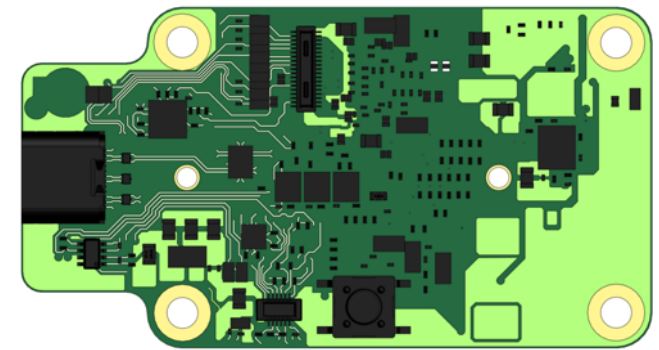
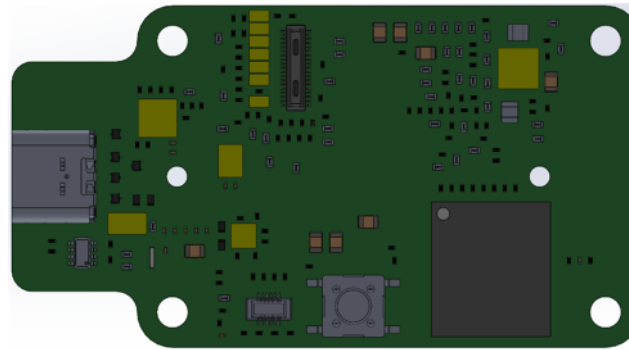
Original

Same PCB Outline
Same Mounting To Main Body
Same Type Of PCB Material
Identical Connector Location

Same Electrical Rating (5 V = 900 ma)

Reduced PCB Thickness

- 1.6 mm To 1.375 mm



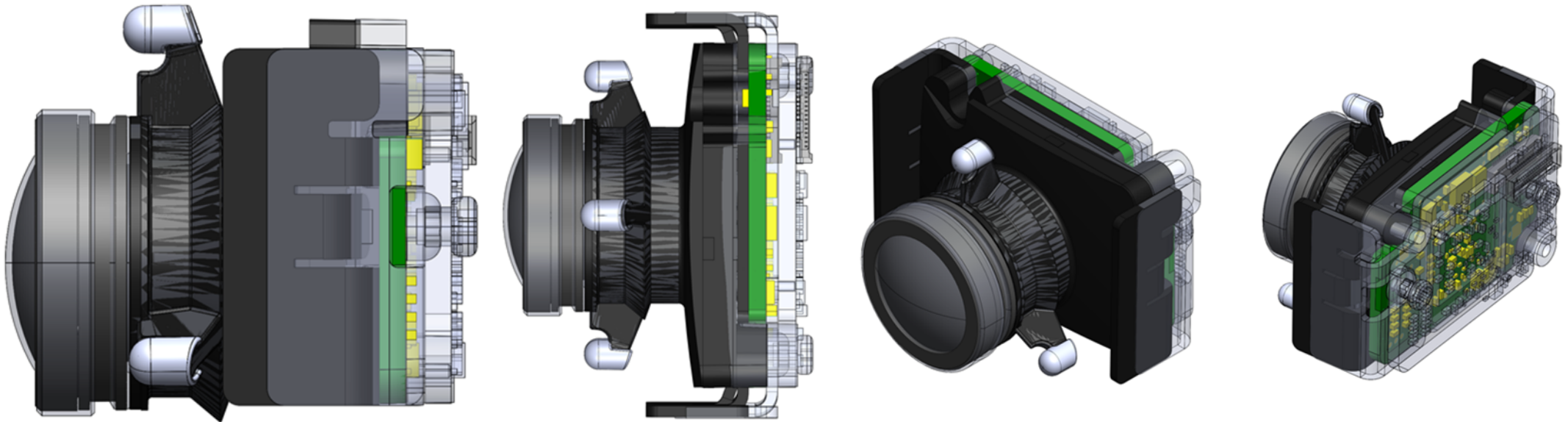
Lens Module

An Additional Second Source Have Been Introduced

- Same Interface Towards Main Body
- Same Attachment By Lens Cap
- Same Interface Towards Mainboard
- Same Sensor Board

Difference Between First And Second Source

- Second Source Is 2.7 mm Longer
- Different Construction Of Optics



The First And Second Source Are Layered In These Illustrations.
Second Source Is Shown As Transparent.

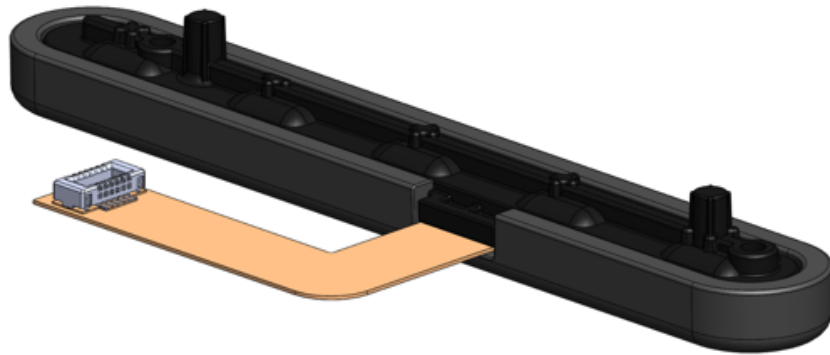
Sensor FPC

Same Material
Same Interface To Mainboard And
Sensor Board

Reduced Length To Fit Both Lens
Modules

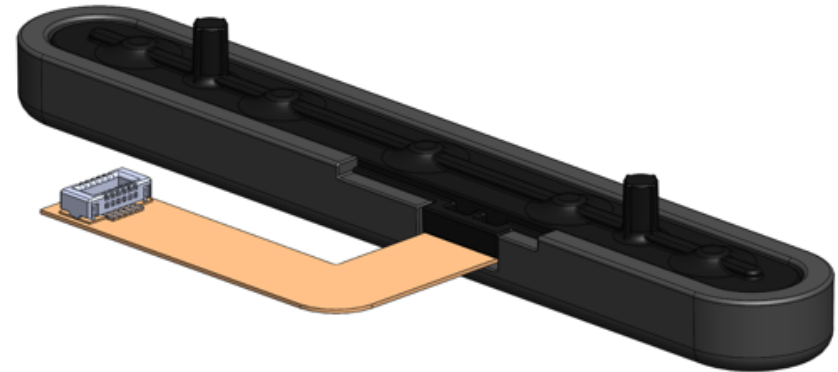
Microphone Array Module

Updated



Same Microphone FPC
Same Materials For All Components
Same Interface Towards Main Body

Original



Updated Mounting Pin Location
○ Updated Hole Location On Mainboard PCB