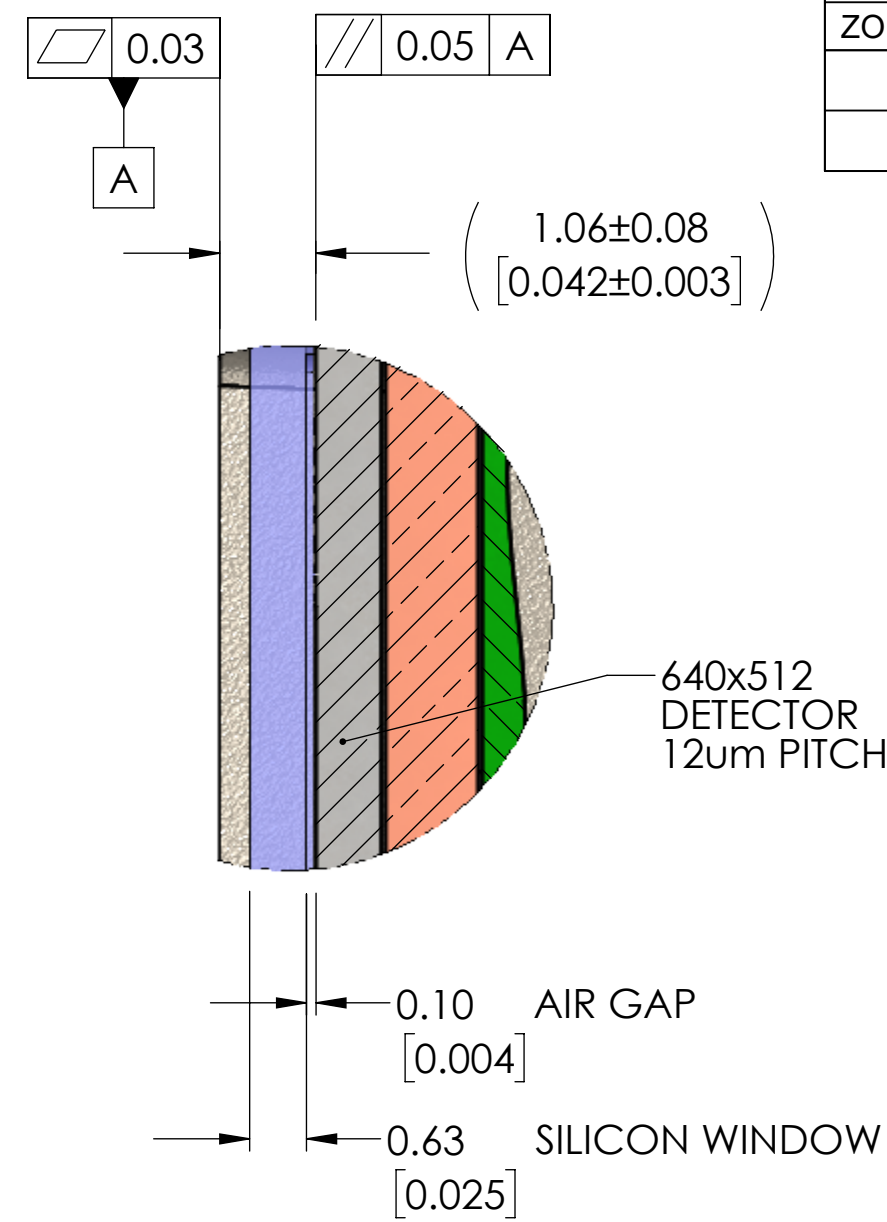


NOTES: UNLESS OTHERWISE SPECIFIED

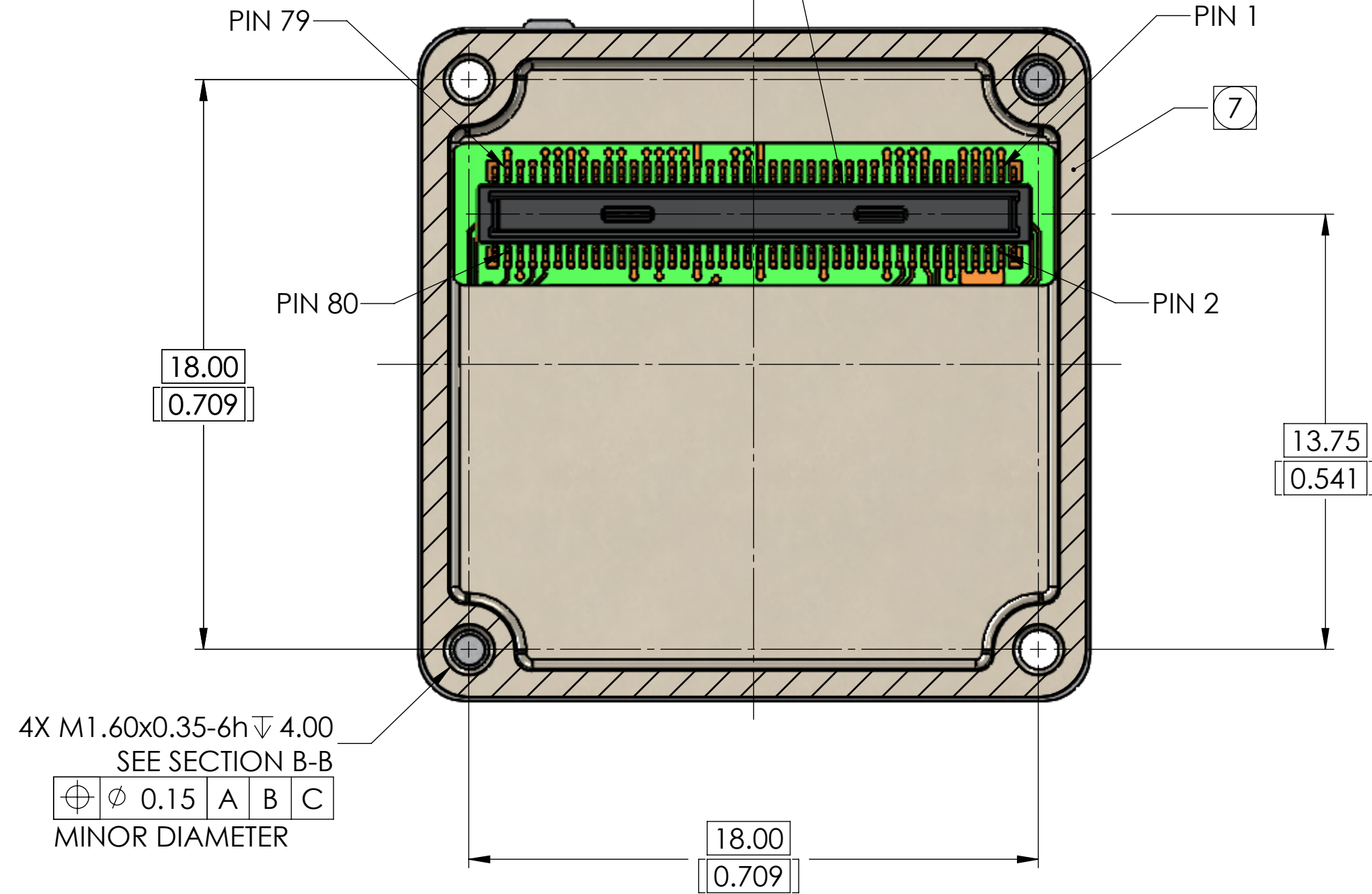
- INDICATED DIMENSIONS ARE FOR AN ARRAY SIZE OF 640x512.
- CONECTOR INTERFACE: HIROSE DF40C-80DP-0.4V(51). MATING CONNECTOR HIROSE DF40C(4.0)80DS-0.4V(51). FOR PIN-OUT DESIGNATIONS SEE BOSON CAMERA USER MANUAL.
- IT IS ESSENTIAL TO OPEN THE BOSON LENSLESS CORE ASSEMBLY IN A CLEANROOM ENVIRONMENT USING CLEANROOM PROTOCOLS. THE SENSOR WINDOW IS IN CLOSE PROXIMITY TO THE ACTIVE AREA SO ANY CONTAMINATION OR DEBRIS WILL BE IN SHARP FOCUS IN THE IMAGE. DEBRIS MAY BE BLOWN OFF THE WINDOW WITH COMPRESSED AIR BUT CONTACT WITH THE WINDOW ITSELF IS TO BE AVOIDED DUE TO THE FRAGILITY OF THE OPTICAL COATINGS. IT IS ALSO IMPERATIVE THAT THE FINAL ASSEMBLY STRUCTURE PROTECTS THE SENSOR WINDOW FROM ANY POSSIBLE DEBRIS OR CONTAMINATION.
- THE BOSON CAMERA USES WIREBONDS TO CONNECT THE SENSOR TO THE PCBA. WIREBONDS ARE FRAGILE SO CARE MUST BE TAKEN NOT TO DISTURB THEM OR ALLOW DEBRIS SUCH AS METAL SHAVINGS TO CONTAMINATE THE ASSEMBLY WHICH COULD CAUSE SHORTING BETWEEN WIRES.

- PLEASE BE AWARE THAT THE SCREWS MOUNTING THE PROTECTIVE COVER ALSO CLAMP THE CAMERA STRUCTURE TOGETHER. WITHOUT THE COVER IN PLACE THE SENSOR ASSEMBLY IS ONLY HELD TOGETHER WITH THE INTERFACE CONNECTORS. ANY FINAL ASSEMBLY SHOULD PROVIDE THE SAME CLAMPING SUPPORT PROVIDED BY THE SCREWS. (SEE SECTION "B-B")
- ANY CUSTOMER DESIGNED LENS ASSEMBLIES OR MOUNTS MUST PROVIDE A SURFACE INTERFACING WITH DATUM "A" THAT IS FLAT TO 0.05mm AND HAS NO DEFECTS IN THE MECHANICAL INTERFACE OR UNDUE STRESS MAY BE IMPARTED TO THE SENSOR ASSEMBLY POSSIBLY CAUSING DAMAGE.
- THE INDICATED SURFACE IS THE MOST OPTIMAL HEATSINKING SURFACE IN ORDER TO PROVIDE THE MOST UNIFORM THERMAL PERFORMANCE OF THE BOSON CAMERA CORE.

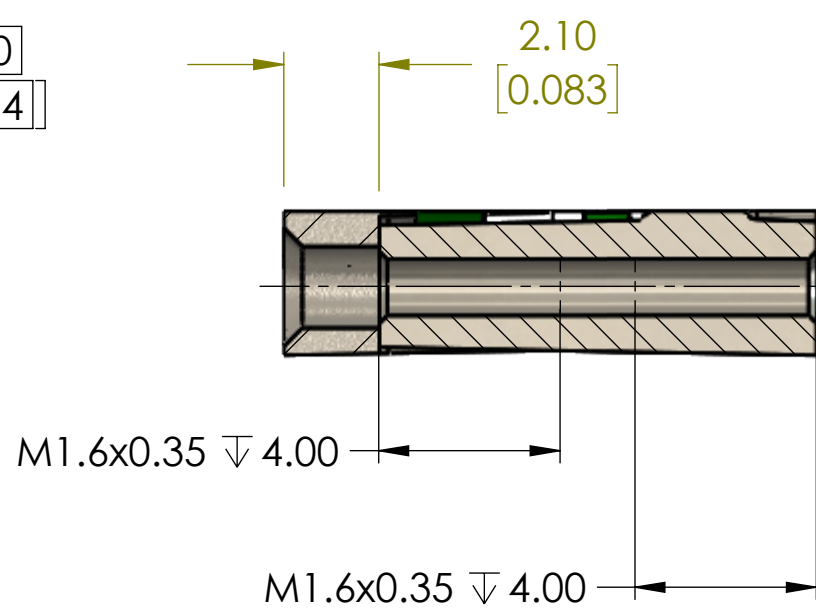
VIEW C  
SCALE 12 : 1



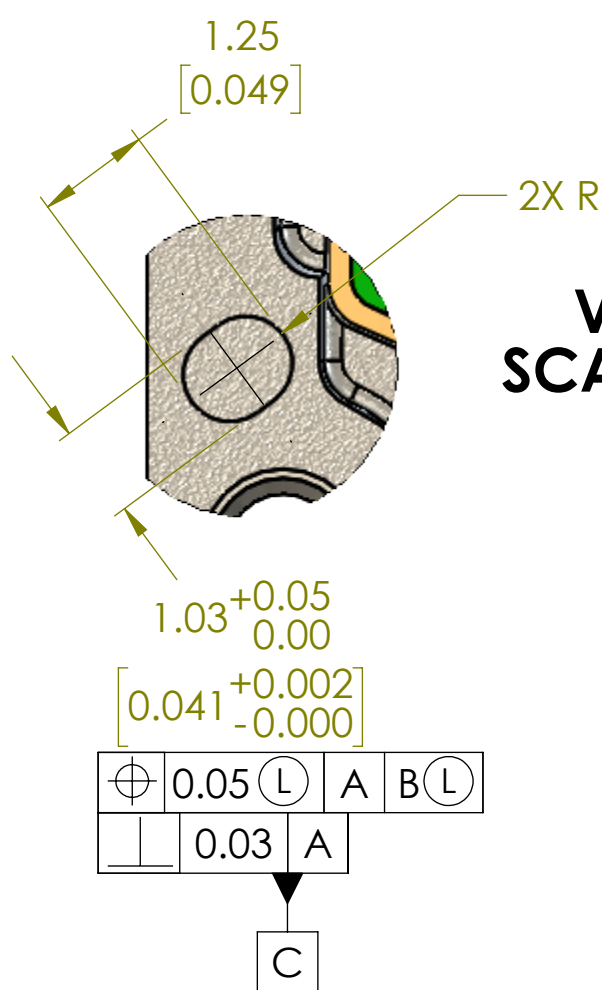
CONNECTOR, HEADER  
HIROSE DF40C-80DP-0.4V(51)  
MATING CONNECTOR  
STACKING HEIGHT 4.0mm  
OUTER PINS ON CONNECTOR  
FOR MECHANICAL SUPPORT ONLY



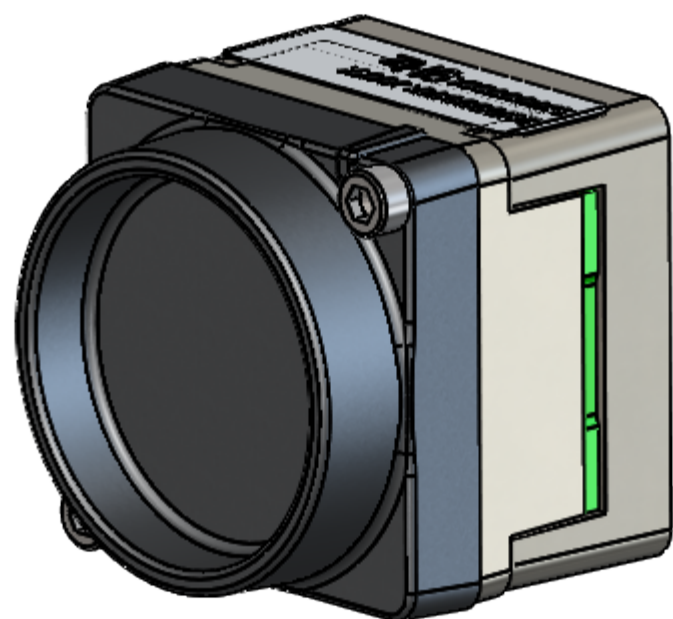
SECTION B-B

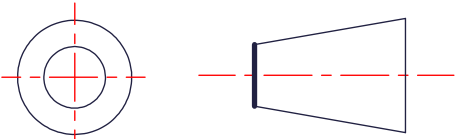



VIEW A  
SCALE 12 : 1



LENSLESS CORE SHOWN  
WITH PROTECTIVE COVER



THIRD ANGLE PROJECTION		PROPRIETARY - FLIR SYSTEMS, INC. THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION TO FLIR SYSTEMS, INC. THIS INFORMATION MUST BE MAINTAINED IN CONFIDENCE AND USED ONLY IN A MANNER CONSISTENT WITH THE DOCUMENTATION AND ANY EXECUTED NON DISCLOSURE AGREEMENT, AND MAY NOT BE DISCLOSED TO ANY THIRD PERSON WITHOUT FLIR'S WRITTEN CONSENT.							
		THIS DOCUMENT DOES NOT CONTAIN ANY EXPORT-CONTROLLED INFORMATION.							
METRIC									
INTERPRET DRAWING PER ASME Y14.5M-1994		MATERIAL		PROJECT NO.				FLIR Systems, Inc. 6769 Hollister Ave Goleta, CA 93117	
UNLESS OTHERWISE SPECIFIED SURFACE ROUGHNESS 32		FINISH		APPROVALS		DATE		TITLE	
X = ±.25 XX = ±.13 ANGULAR = ±.5° FILLET RADII = .13 MAX		DWN COVINGTON		CHK		05/09/16		ICD, 21-640 BOSON LENSLESS CAMERA CORE	
		UNLESS OTHERWISE SPECIFIED ALL MEASUREMENTS ARE IN MM. ALL DIMENSIONS IN ( ) ARE INCHES. DO NOT SCALE DRAWING.		DSGN		SIZE D		CAGE 064Y2	
		ENG		APP		DWG NO. 21-640 LC		REV P02	
		CALC WT:				SCALE 6:1		PRINTED: 4/30/2020	
						SHEET 1 OF 1			
3				2		SOLIDWORKS MODEL: 21-Boson Shutterless Camera Core MODEL REVISION: F		1	