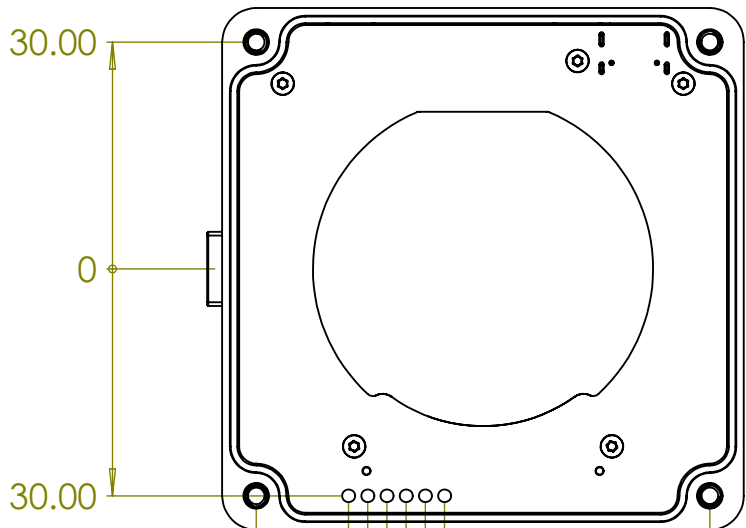
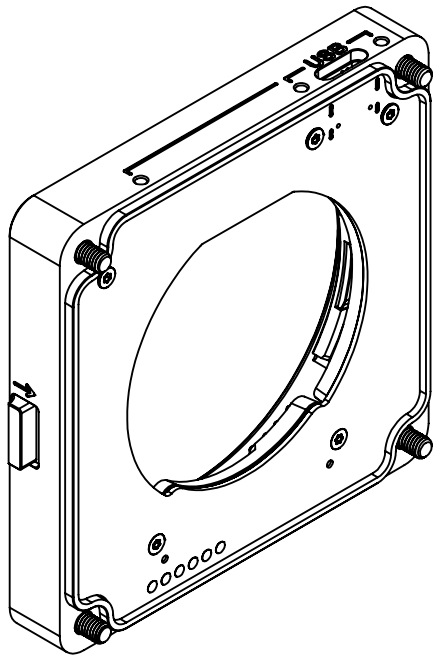
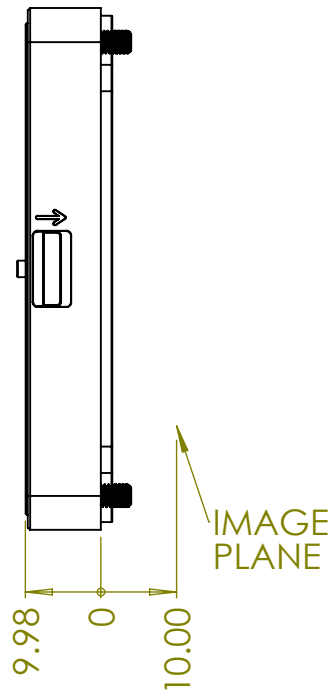
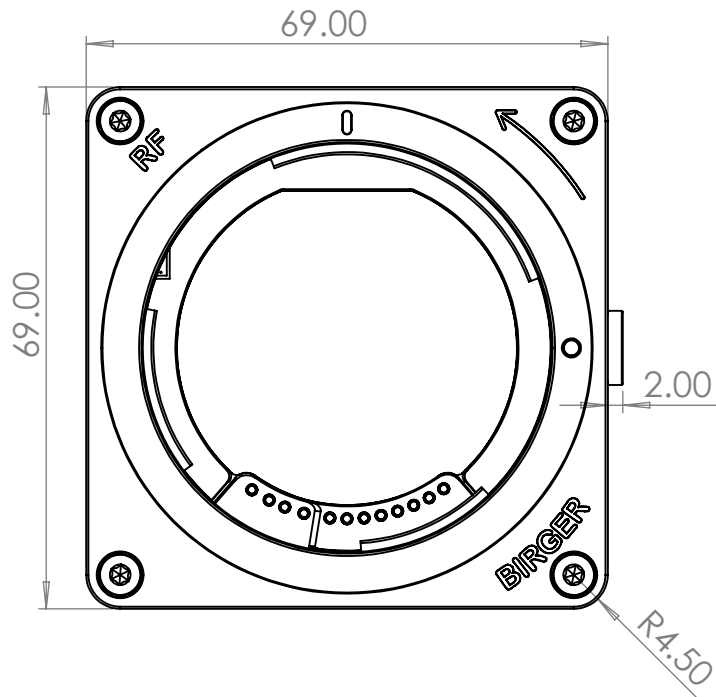
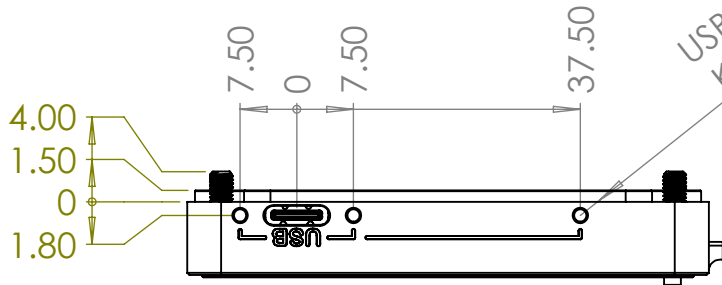
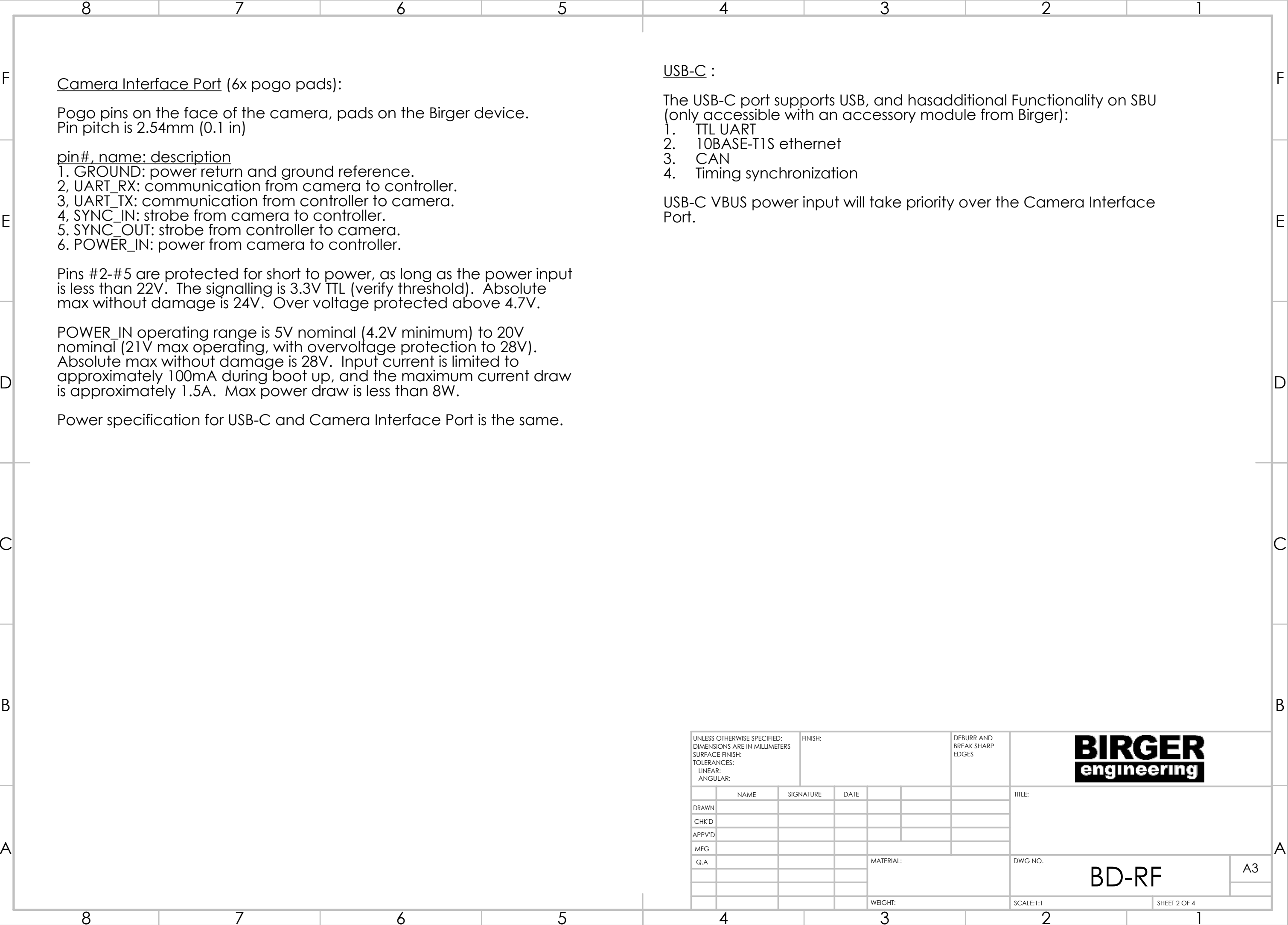




- #6 - POWER_IN - 17.78
- #5 - SYNC_OUT - 15.24
- #4 - SYNC_IN - 12.70
- #3 - UART_TX - 10.16
- #2 - UART_RX - 7.62
- #1 - GROUND - 5.08



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:				FINISH:		DEBURR AND BREAK SHARP EDGES		BIRGER engineering	
DRAWN	NAME	SIGNATURE	DATE						
CHK'D								TITLE: CanonRF Lens Controller (Birger size BD footprint)	
APPV'D									
MFG								DWG NO. BD-RF	
Q.A									
								SCALE:1:1	
								SHEET 1 OF 4	
								A3	



Camera Interface Port (6x pogo pads):

Pogo pins on the face of the camera, pads on the Birger device.
Pin pitch is 2.54mm (0.1 in)

pin#, name: description

1. GROUND: power return and ground reference.
2. UART_RX: communication from camera to controller.
3. UART_TX: communication from controller to camera.
4. SYNC_IN: strobe from camera to controller.
5. SYNC_OUT: strobe from controller to camera.
6. POWER_IN: power from camera to controller.

Pins #2-#5 are protected for short to power, as long as the power input is less than 22V. The signalling is 3.3V TTL (verify threshold). Absolute max without damage is 24V. Over voltage protected above 4.7V.

POWER_IN operating range is 5V nominal (4.2V minimum) to 20V nominal (21V max operating, with overvoltage protection to 28V). Absolute max without damage is 28V. Input current is limited to approximately 100mA during boot up, and the maximum current draw is approximately 1.5A. Max power draw is less than 8W.

Power specification for USB-C and Camera Interface Port is the same.

USB-C :

The USB-C port supports USB, and has additional Functionality on SBU (only accessible with an accessory module from Birger):

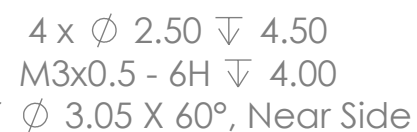
1. TTL UART
2. 10BASE-T1S ethernet
3. CAN
4. Timing synchronization

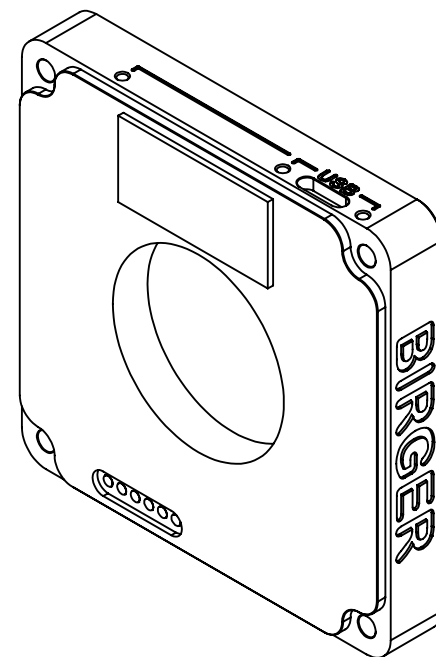
USB-C VBUS power input will take priority over the Camera Interface Port.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:				FINISH:		DEBURR AND BREAK SHARP EDGES			
NAME		SIGNATURE		DATE				TITLE:	
DRAWN									
CHK'D									
APPV'D									
MFG									
Q.A						MATERIAL:		DWG NO.	
								BD-RF	
								A3	
						WEIGHT:		SCALE:1:1	
								SHEET 2 OF 4	



The 3mm depth specified for this pocket will allow for all BD-footprint controllers from Birger, to be utilized with a single camera design.

A3



All of the offerings from Birger will have this same footprint, electrical and software interface. After Canon RF is in volume production, Micro Four Thirds is the next planned release.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:						FINISH:		DEBURR AND BREAK SHARP EDGES		BIRGER engineering				
	NAME		SIGNATURE		DATE				TITLE:					
DRAWN														
CHK'D														
APPV'D														
MFG														
Q.A						MATERIAL:			DWG NO.		BD-RF		A3	
						WEIGHT:			SCALE:1:1			SHEET 4 OF 4		