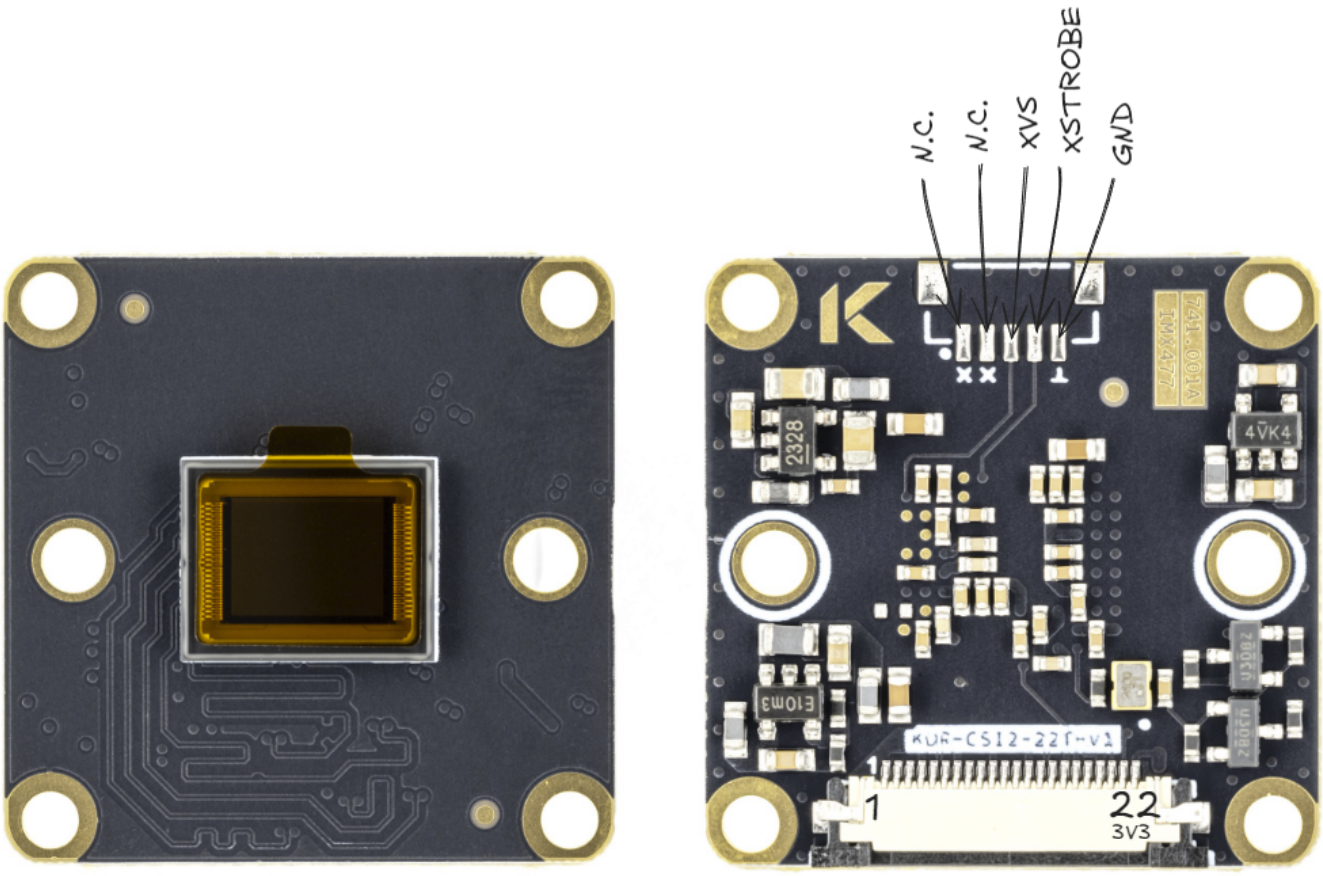
477x-CSI

The IMX477 is a stacked back side illuminated Exmor RS CMOS image sensor with a 7.857 mm (type 1/2.3″) optical format and 4056 × 3040 active square pixels at a 1.55µm pitch, giving 12.3-megapixel resolution. It uses an electronic rolling shutter with variable integration time, 10/12-bit ADCs that stream RAW12/10/8 over a 2 or 4-lane MIPI CSI-2 interface running up to 2.1Gb/s per lane. Normal mode delivers the full 4056 x 3040 picture at 60fps in 10-bit format and can stream up to 240fps in 1080 resolution. Auxiliary functions include pixel-binning and V-sub-sampling engines, ambient light and temperature sensors, flash strobe drive, HDR mode, independent image flip/mirror, power save mode and multi camera synchronization. Best suitable for: consumer 4K camcorders and other high speed, multi camera video systems.

Camera variants

SKU	Lens mount	Chroma	Note
477C-CSI-M12	9.5mm for wide angle lenses	RGB Color	**Most common use for wide angle and fish-eye lenses.**
477C-CSI-M12L	14.7mm for regular and telephoto lenses	RGB Color	**Modification for lenses above 6mm (typical)**

Pinout



Interface connector 22pin 0.5mm pitch 687122183622 from Würth Elektronik. Top facing pins.

Pin	Signal	Description
1	GND	
2	D0_N	
3	D0_P	
4	GND	
5	D1_N	
6	D1_P	
7	GND	
8	CLK_N	
9	CLK_P	

10	GND	
11	D2_N	
12	D2_P	
13	GND	
14	D3_N	
15	D3_P	
16	GND	
17	ENABLE	Wired to sensor RESET_N
18	N.C.	
19	GND	
20	SCL	
21	SDA	
22	+3.3V	

AUX wiring

Interface connector 5 pin 1mm pitch 665305124022 from Würth Elektronik.

Pin	Signal	Description
1	N.C.	Not connected
2	N.C.	Not connected
3	XVS	
4	XSTROBE	
5	GND	

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