Mosaic Core Specification

	Mosaic Core Specification	n	
Core Number: C219SPX	Starter Kit Number: S219SPX	Rev. 3	11/05/2021
Product Specifications:	Description		
Microbolometer	Uncooled Vanadium Oxide		
Pixel Pitch	12 Microns		
Spectral Response	7.8 - 14 Microns		
Sensor Resolution (Array Format)	200 (h) x 150 (v); 30,000 pixels		
Frame Rate	Fast Frame - up to <32Hz		
Non-Uniformity Correction (NUC)	Automatic NUC (with shutter)		
Video Output Interfaces	USB		
Power:			
Power Requirment	3.3-5.0V, <50mW (Core only), 300mW (Core + 0	Coprocessor Board)	
Optical & Mechanical:			
Focal Length	9.1mm EFL		
F-number (Focal Length/aperture)	f/1.00		
Spatial Resolution (IFOV, center)	1.32		
Field of View (FOV)	15° Horizontal x 12° Vertical		
Detection Range	758m (based on Johnson Criteria)		
Recognition Range	190m (based on Johnson Criteria)		
Identification Range	108m (based on Johnson Criteria)		
Distance to Spot Ratio	126:1		
Core Size/ Core Weight	20mm x 20mmx 21mm	Core Weight: 12 g	
Seek Software Development Kit:	2011111 X 20111111 Z 1111111	Core Weight. 12 g	
Supported Platforms	USB: Seek Linux, Windows, & Android SDK		
• • • • • • • • • • • • • • • • • • • •		Andreid C	DV
Output Formates (User selectable)	Linux / Windows SDK	Android S	שוא
	16-bit filtered pre AGC	16-bit filtered pre AGC	.1. 1.9
	32-bit ARGB post colorization.	32-bit ARGB post colorization in	
	32-bit floating point or 16-bit fixed point	32-bit floating point or 16-bit fixe	ed point thermography
Imaging Specifications:	Calibrated Output in °C, °F, K		
Imaging Range	-40°C to +330°C at ambient operating temprature		
Thermography Accuracy	Center spot temperature greater of ±5°C or 5% between 5°C to 140°C		
	Center spot temperature greater of ±10°C or 10% (typical) above 140°C		
	All measured at 25°C ambient operating temperature and nominal measurement distance of 12 inches.		
	Tomporature reported is Contar Spot tomporature, which is an everyon of the contar 26 pivols		
	Temperature reported is Center Spot temperature, which is an average of the center 36 pixels.		
Sensor Sensitivity	65 mK (typical), <100 mK (max) @ 25°C Factory default emissivity is set to 0.97. Emissivity is adjustable using the SDK.		
Emmissivity	Factory default emissivity is set to 0.97. Emissiv	ity is adjustable using the SDK.	
Environmental Conditions:	-10°C to +60°C (-14°F to 140°F)		
Operating Temperature Range	· · · · · · · · · · · · · · · · · · ·		
Storage Temperature Range	-40°C to +80°C (-40°F to 176°F)		
Solar Protection	Yes		
Humidity	10%~95%RH, non-condensing		
Regulatory Accessories:	ROHS, WEEE, REACH		
Cushion	Yes CUSHION THERMAL BRACKET SENS	OR FLEX INTERPACE USB FLEX	
Bracket	-	BOARD	
	Yes		
Sensor Flex	Yes		
Coprocessor Board		CESSOR BOARD AND INTERFACE KIT	
USB Flex	Yes Provid	led by Seek or receive design files for atogration into other electronics	
Customer Responsibilities:	line?		
IP Rating	IP67	into final avaduat haveira	
Shock/Vibe	Customer responsibility with proper integration	i into imai product nousing	



