영유아 케어 서비스 IoT 사양서

1. SBC 사양

구분	모델명	항목	사양	내용
SBC	Lattepanda 3 deltha	Processor	Intel® Celeron® N5105	
		Core	2.0-2.9GHz Quad-Core, Four-Thread	
		Graphics	Intel® UHD Graphics (Frequency: 450 – 800MHz)	
		Memory	LPDDR4 8GB 2933MHz	
		Storage	64GB eMMC	
		Connectivity	Wi-Fi 6 @ 2.4/5 GHz	
		GPIO	Up to 23x Digital Input/Output (7 PWM)	센서 (IMU/TH)
		Serial Interfaces	I2C (IMU)	센서 (IMU)
		USB	USB 3.2 Gen2 Type A	센서 (CAM)
			USB 3.2 Gen1 Type A	키보드 및 마우스
		Power	Type-C Input: 12/15V DC	전력 공급
		Display	HDMI 2.0b: Up to 4096x2160 @ 60Hz HDR Support	
		Co-Processor	ATMEGA32U4	
		Dimensions	125 x 78 x 16mm	
		Operating Temperature	0℃~75℃	

2. 센서 사양

구분	모델명	항목	사양	내용
CAM	PWC-500	Interface	USB 2.0	
		Video Speed	30fps	
		Resolution	1920*1080, 1280*720	1920*1080
		Image format	yuy2, jpeg	jpeg
		Microphone	Digital-mic	
		image control function	auto focus	
			auto whitle balance	
			auto exposure control	
T/H	DHT-11	Humidity	Resolution: 16Bit	
			Repeatability: ±1% RH	
			Accuracy: At 25℃ ±5% RH	
		Temperature	Resolution: 16Bit	
			Repeatability: ±0.2℃	
			Range: At 25℃ ±2℃	
		Sampling Period	more than 2 seconds	
		Pin Description	VCC, the VDD power supply 3.5 ~ 5.5V DC	
			DT, DATA serial data, a single bus	
			GND, the negative power	
IMU	MPU-6050	Gyroscope	Digital-output triple-axis angular rate sensors	
			full scale range of ±250, ±500, ±1000, and ±2000°/sec	±2000°/sec
		Accelerometer	Digital-output triple-axis accelerometer	
			full scale range of ±2g, ±4g, ±8g and ±16g	±16g
		Temperature	Digital-output -40℃ to +85℃	
		Pin Description	VCC, the VDD power supply 3.5V DC	
			SCL	클럭 신호선
			SDA	데이터 신호선
			GND, the negative power	
			INT, interrupt	