

LAMPIRAN

Lampiran 1. Spesifikasi NVIDIA Jetson Orin Nano

Technical Specifications		
	Jetson Orin Nano 4GB	Jetson Orin Nano 8GB
AI Performance	20 TOPS	40 TOPS
GPU	512-core NVIDIA Ampere architecture GPU with 16 tensor cores	1024-core NVIDIA Ampere architecture GPU with 32 tensor cores
Max GPU Freq.	625MHz	
CPU	6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3	
CPU Max Freq.	1.5GHz	
Memory	4GB 64-bit LPDDR5 34GB/s	8GB 128-bit LPDDR5 68GB/s
Storage	- (Supports external NVMe)	
Camera	Up to 4 cameras (8 via virtual channels*) 8 MIPI CSI-2 lanes D-PHY 2.1 (up to 20Gbps)	
Video Encode	1080p30 supported by 1-2 CPU cores	
Video Decode	1x 4K60 (H.265) 2x 4K30 (H.265) 5x 1080p60 (H.265) 11x 1080p30 (H.265)	
PCIe	1 x4 + 3 x1 (PCIe Gen3, Root Port, and Endpoint)	
USB	3x USB 3.2 Gen2 (10Gbps) 3x USB 2.0	
Networking	1x GbE	
Display	1x 4K30 multi-mode DP 1.2 (+MST)/eDP 1.4/HDMI 1.4	
Other I/O	3x UART, 2x SPI, 2x I2S, 4x I2C, 1x CAN, DMIC & DSPK, PWM, GPIOs	
Power	7W - 10W	7W - 15W
Mechanical	69.6mm x 45mm 260-pin SO-DIMM connector	

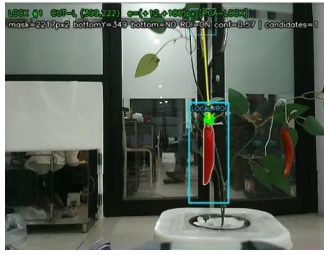
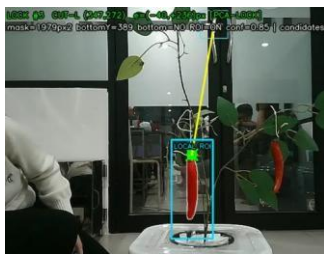
* Virtual channel-related camera information for Jetson Orin Nano is not final and subject to change.

** Refer to the Software Features section of the latest NVIDIA Jetson Linux Developer Guide for a list of supported features.

Lampiran 2. Spesifikasi RGB Orbbec Astra Pro Camera

HW Specs	Depth Image Res.	640 x 480 (VGA) @ 30 FPS
		320 x 240 (QVGA) @ 30 FPS
		160 x 120 (QQVGA) @ 30 FPS
	RGB Image Res.	1280 x 720 @ 30 FPS
		640 x 480 @ 30 FPS
		320 x 240 @ 30 FPS
	FOV	73D x 60H x 49.5V
	Size	165mm x 30mm x 40mm
	Operation Range	0.6m to 8.0m Optimal 0.6m to 5.0m
	Operating Temp.	0 - 40°C
	Data Interface	USB 2.0
	Microphones	2 (Build-in)
SW Support	Power Supply	USB 2.0
	Power Consumption	< 2.4 W
	OS	Android/Linux/Windows 7/8/10
Accuracy	SDK	Astra SDK or OpenNI 2 or 3 rd Party SDK
	Middleware	Astra Middleware or 3 rd Party Middleware
	@ 1m	± 1-3mm
	@ 2-3m	± 12.7mm

Lampiran 3. Data Iterasi *Visual Servoing*

Data Pengujian	Mulai sesi	Ready	Error terkoreksi
A			81,22%
B			90,81%
C			81,20%
D			91,10%
E			99,10%

