

## 1. JETSON NANO DEVELOPER KIT

TECHNICAL SPECIFICATIONS		
GPU	NVIDIA Maxwell™ architecture with 128 NVIDIA CUDA® cores	
CPU	Quad-core ARM® Cortex®-A57 MPCore processor	
Memory	4 GB 64-bit LPDDR4	
Storage	16 GB eMMC 5.1 Flash	
Video Encode	4K @ 30 (H.264/H.265)	
Video Decode	4K @ 60 (H.264/H.265)	
Camera	12 lanes (3x4 or 4x2) MIPI CSI-2 DPHY 1.1 (18 Gbps)	
Connectivity	Gigabit Ethernet	
Display	HDMI 2.0 or DP1.2   eDP 1.4   DSI (1 x2) 2 simultaneous	
UPHY	1 x1/2/4 PCIE, 1x USB 3.0, 3x USB 2.0	
I/O	1x SDIO / 2x SPI / 4x I2C / 2x I2S / GPIOs -> I2C, I2S	
Size	69.6 mm x 45 mm	
Mechanical	260-pin edge connector	



## 2. DRIVE AGX XAVIER™ DEVELOPER KIT (SKU 2000)

TECHNICAL SPECIFICATIONS			
Component	Description	Details	
Two Xavier SoCs	8-core "Carmel" CPUs based on ARM v8 ISA		
	Deep Learning Accelerators (DLA)	5 TOPS (FP16)   10 TOPS (INT8)	
	NVIDIA Volta™-class integrated GPU	20 TOPS (INT8)   1.3 TFLOPS (FP32)	
	Programmable Vision Accelerators (PVA)	1.6 TOPS	
	Image Signal Processor (ISP)	1.5 Gigapixels/s	
	Video encoder	1.2 GPix/s	
	Video decoder	1.8 GPix/s	
DRIVE AGX System I/O	Camera	90 Gb/s over 16x GMSL(R) ports	
	LIDAR/Radar	~50 Gb/s over Ethernet	
	Vehicle IO	6 CAN interfaces	
Memory Bandwidth	Xavier	>250 GB/s	
Included Accessories	Camera	2 Megapixel RCCB Camera with 60-degree FOV	
	Vehicle harness	Connects to vehicle IO ports	
	Other cables	Connects the DRIVE AGX system to a host development computer	
DRIVE Software	DRIVE OS	NVIDIA CUDA® Libraries,	
<u> </u>	Preflashed Linux Ubuntu OS	including TensorRT®	
	(Note: QNX option will be available soon)	(for access to deep learning	
		hardware accelerator);	
		NVMEDIA (for access to	
		hardware accelerators for image	
		processing and computer vision);	
		compute and NVIDIA CUDA tools.	
	NVIDIA DriveWorks SDK	Provides reference applications,	
		tools, and a comprehensive	
		library of modules that leverage	
		the computing power of the DRIVE AGX Platform.	
	DRIVE AV	Provides modules for perception,	
	DIVIVEAV	mapping,	
		and planning that leverage the	
		DriveWorks SDK.	
	DRIVE IX	Algorithms to visualize the	
		vehicle's surroundings,	
		Al-based driver monitoring, and	
		in-cabin assistance.	



## 3. NXP HOVER DRONE KIT

Technical and Functional Specifications			
General Features	This is a professional development kit and detailed assembly is required		
Size	Carbon fiber mechanical frame approx. 500mm diagonal size		
	150mm x 150mm large top and bottom plate for mounting electronics		
	Dual 10mm diameter rod x 60mm rail mounting system		
Support and Software	Supports expansion using a Linux companion computer for Vision, ROS, Artificial Intelligence		
	Supports connection to Rapid IoT with add-on adapter board		
Analog			
CAN Transceiver	TJA1042: High-speed CAN transceiver with standby mode		
and Controllers	TJA1100HN: IEEE 100BASE-T1 compliant Automotive Ethernet PHY		
	Transceiver		
Voltage Level	NTB0104 : Dual supply translating transceiver; auto direction sensing; 3-state		
Translators			
Sensors	FXOS8700CQ : Digital Motion Sensor - 3D Accelerometer (±2g/±4g/±8g) + 3D Magnetometer		
	MPL3115A2 : 20 to 110 kPa, Absolute Digital Pressure Sensor		
Processors and	K66_180 : Kinetis® K66-180 MHz, Dual High-Speed & Full-speed USBs,		
Microcontrollers - K6x	2MB Flash Microcontrollers (MCUs) based on Arm®Cortex®-M4 Core		
Ethernet			
Identification and	A71CH: Plug and Trust - The fast, easy way to deploy secure IoT connections		
Security -			
Authentication	A1006 : Secure Authenticator IC - Embedded Security Platform		