

P05D00121-00

ST STM32N657

Front View



Features

- Embedded Proprietary Processing Unit : ST Neural-ART Accelerator Engine
- Graphics & Multimedia : Neo-Chrom 2.5D GPU, JPEG Codec & H.264 Encoder on baseline profile, main profile, high profile level 1 to level 5.2, 1080p15 and 720p30
- Video : 2-lane CSI-2, ISP with Three Parallel Pipes on the Same Input Stream
- OSM v1.2, Size-S Module 30 x 30mm

Specifications

Hardware			
CPU	STM32N657	ARM 32-bit Cortex-M55, frequency up to 800MHz,	
GPU	Neo-Chrom 2.5D GPU	Scaling, rotation, alpha blending, texture mapping, perspective transformation.	
NPU	Neural-ART Accelerator	Frequency up to 1GHz, 600Gops, 288MAC/cycle	
Memory	On Board RAM	Internal 4.2MB-contiguous SRAM. External 32MB PSRAM.	
	On Board Flash (Default Boot Device)	External 128MB NOR FLASH.	
I/O	Display	1 × 24 bits Parallel RGB	
	USB	2 × USB 2.0 OTG	
	Ethernet	10/100Mbps	
	Default Peripheral (maximum)	3 x UART 2 x UART (RTS/CTS) 2 x CAN 2 x I2C 1 x SPI 2 x SDIO*	1 x SA1 1 x I2S2 1 x 2-lane CSI 23 x GPIOs

Note1. Selectable 4/8 bits on SDIO1 and SDIO2 for 4bits only.

Software

OS	RTOS	FreeRTOS (or Others RTOS)
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Block Diagram

