

GRiTT Series Graphic Processors

■ Overview

The MN67760, MN67761 and MN677611 are graphic processors that combine the processor and a number of engines. These graphic processors offer a diversity of functions such as coordinates conversion, professional-quality 2D/3D renderings, and layer synthesis through a built-in video output engine. They are ideal for car navigation and other systems requiring advanced graphic interface.

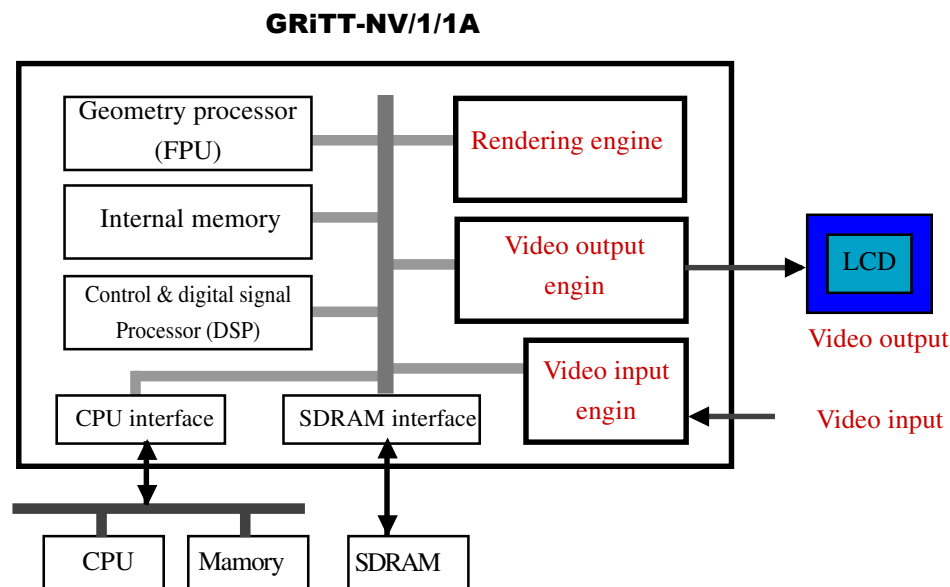
■ Features

- High-speed 150 Mpixels/sec. and 200 Mpixels/sec. rendering engine
- Built-in coordinates conversion processor for internal processing including various viewpoint conversions
- Built-in polygon rendering engine for high-speed plotting of intricate topography
- Built-in video output engine for 6- and 8-layer synthesized display
- Built-in video input
- Transparent image synthesis possible
- Built-in PCI interface (MN677611 only)
- MPEG4 video play possible (MN67761 and MN677611)

■ Applications

- Navigation systems ● PDAs ● AV equipment ● Amusement machines

■ Block Diagram

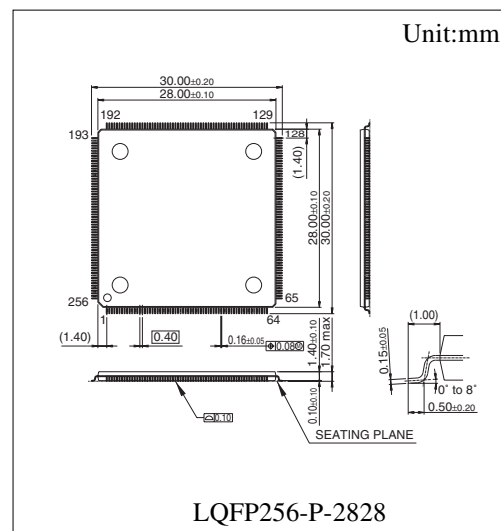
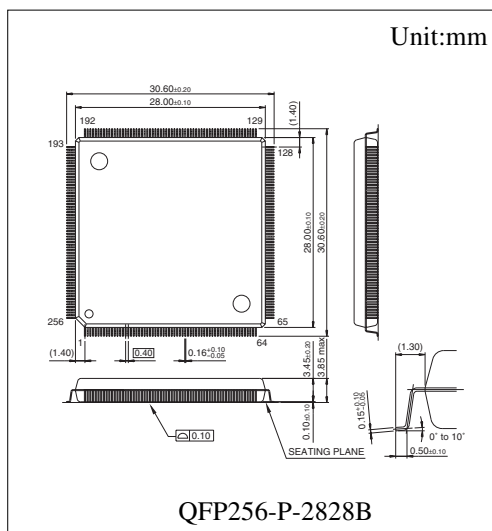


¶ The products and specifications are subject to change without any notice. Please ask for the latest product standards to guarantee the satisfaction of your product requirements.

■ Specification

Parameter \ Part No.	GRiTT-NV MN67760	GRiTT-1 MN67761	GRiTT-1A MN677611
Max. Operating Frequency	100 MHz	133 MHz	
Rendering Rate	150 Mpixel/s	200 Mpixel/s	
Rendering Functions	2D/3D line Rendering, polygon drawing		
	High-speed polygon Rendering engine		
	BITBLT, character Rendering		
	Texture mapping (point)	Texture filtering	
	Alpha blending (50% only)	Image quality enhancement	
	Flat shading	Alpha blending (32 steps)	
Coordinates Conversion Functions	Gouraud shading		
Coordinates Conversion Functions	Floating decimal point calculation processor built-in		
Video Input	1/2 reduction possible	1/2, 1/4 reduction possible	
	—	IP conversion	
Video Output	—	—	
	—	Include multi-channel input (2 ch.) PCI. Drawing rate is halved for each channel.	
	SVGA(800×600)	XGA(1024×768)	
	Layer translucent image synthesis (8-bit/pixel) Color table (256 shades × 1)	Layer translucent image synthesis (8 and 16-bit/pixel) Color table (256 shades × 2)	
No. of Display Layers	Analog output		
Host Interface	6	8	
Host Interface	10 transmission, DMA transmission		
	—	—	MPX interface
	—	—	PCI interface
MPEG4 Video Decoding	—	Address conversion	
MPEG4 Video Decoding	—	Available	
Operating Temperature	-35°C to +85°C		
Power Supply Voltage	2.5V(internal) / 3.3V(external)	1.8V(internal) / 3.3V(external)	
Power Consumption	1.35 W(100 MHz typ)	1.0 W(133 MHz typ)	
Package	256-pin QFP	256-pin QFP	256-pin LQFP

■ Package



**The details of this product shall be released under an NDA agreement.
For details, please contact our sales office.**

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