

■ Overview

■ Features

- ## ■ Applications

Unit: mm

Top View Dimensions:

- Overall Width: 30.00 ± 0.20
- Overall Height: 28.00 ± 0.10
- Pin 1 Indication: 156, 105, 104, (1.25)
- Pin 52 Indication: 53, 52
- Pin 208 Indication: 208, 1
- Pin 1 Indication: (1.25)
- Pin 52 Indication: 0.50, 0.20 ± 0.05 , $\phi 0.08 \pm 0.01$

Side View Dimensions:

- Pin Height: 1.40 ± 0.10
- Pin Spacing: 1.70 max
- Pin Thickness: 0.10 ± 0.10
- Seating Plane: Indicated by a line and arrow pointing to the bottom of the package.

Detail View Dimensions:

- Pin Thickness: 0.15 ± 0.05
- Pin Spacing: 1.00
- Pin Angle: $1^\circ \text{ to } 8^\circ$
- Pin Thickness: 0.50 ± 0.20

LQFP208-P-2828

The block diagram illustrates the system architecture of the MN6775511. At the top, the **SDRAM** is connected to the **Memory Controller** via a bidirectional bus. The **Memory Controller** is centrally located and connected to several other components:

- DSP-type Processor**: Connected via a bidirectional bus.
- Bit Stream FIFO**: Connected via a bidirectional bus.
- Buffer Memory**: Connected via a bidirectional bus.
- Pixel Operation Unit**: Connected via a bidirectional bus.
- IOP Unit (Multi-thread Processor)**: Connected via a dashed line labeled "DMA control".
- I/O control**: A dashed line labeled "I/O control" connects the IOP Unit to the output units.

 The **DSP-type Processor** is connected to the **VLD Uint** and the **Bit Stream FIFO**. The **VLD Uint** is connected to the **IDCT Unit**, which in turn connects to the **Motion Compensation Unit**. The **Motion Compensation Unit** is connected to the **Buffer Memory**. The **Buffer Memory** is connected to the **Stream Unit**, **Host I/F Unit**, **Video Output Unit**, and **Audio Output Unit**. The **Stream Unit** and **Host I/F Unit** have bidirectional connections with the **Buffer Memory**. The **Video Output Unit** and **Audio Output Unit** have unidirectional connections from the **Buffer Memory**. The **Pixel Operation Unit** is connected to the **Stream Unit** and the **Audio Output Unit**.



Products and specifications are subject to change without notice. Please ask for the latest Product Standards to guarantee the satisfaction of your product requirements.

<http://panasonic.co.jp/semicon>
New publication, effective from 19 Feb. 2003

■ Specifications

MN6775511

Input stream	MPEG1 system stream MPEG2 program stream
Video decode	MPEG1 MPEG2 (MP@ML, SP@SL, MP@LL)
Still picture decode	Sub picture unit (DVD) Overlay Graphics and Text (SVCD) Audio Still Video (DVD Audio) JPEG (Exchangeable image file format)
Audio decode	Dolby Digital MPEG1&2 Layer2/Layer3 (MP3) DTS DVD Video: Linear PCM DVD Audio: Linear PCM/MLP WMA CDDA
Copy protection	Descrambler (CSS, CPPM, CPRM) Audio watermark detect Macrovision Rev. 7.1.L1 Macrovision (Progressive) Rev. 1.03 CGMS WSS
Video output	Five 54 MHz 10-bit Video DACs NTSC/PAL/PAL60 video encode Adaptive IP conversion Progressive Scan Y/Cb/Cr (Interlace/Progressive) Y/C/Composite (Interlace) RGB ITU-R656 BTA T-1004
Audio output	PCMoutput: 6-ch. + Mix 2-ch. IEC60958/61937 Virtual Sonic Bass Redirection Volume (Channel balance, level)
Trick play	Frame still/Field still I-picture Play IP-picture Play (with Audio) Slow forward/Slow reverse JOG
Other functions	ITU-R656 input/Overlay Video noise reduction: Block NR / Mosquito NR / three-dimension NR Two OSD planes Scaling (Main picture, Sub picture, JPEG, ITU-R656 input) Thumbnail
Power consumption	3.3 V (I/O) / 1.5 V (Core)
Package	208 pin LQFP
Process	0.15 μ m 5-layer metal CMOS

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