

## **Exhibit J**

Part Number Search

(For Search)

Detail product category  
will be displayed on click.

- Microcomputer

- 8bit

- General Purpose

- 16bit

- 32bit

- Image Sensor

- General-Purpose Linear

- IC

- Semiconductor Sensor

- MotorDrive

- For LCD

- Small-signal device

- Composite Device

- Power Device

- GaAs device

- Opto-Electronic Device

- For Video-Audio

- For

- Information-Communication

- Interface

- Others

## Microcomputer - 8bit - General Purpose

Matsushita unified part number (Conventional part number)	ROM (×8-bit)	RAM (×8-bit)	I/O (Pins)	Package
<a href="#">MN101C28A</a>	32K	1.5K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28C</a>	48K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28D</a>	64K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28F</a>	96K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C28L</a>	96K	10K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C309</a>	24K	1K	54	LQFP064-P-1414(Pb Free) SDIP064-P-0750C(Pb Free)
<a href="#">MN101C30A</a>	32K	1.5K	54	LQFP064-P-1414(Pb Free) SDIP064-P-0750C(Pb Free)
<a href="#">MN101C38A</a>	32K	1.5K	57	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C38C</a>	48K	2K	57	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C39C</a>	48K	2K	61	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C425</a>	8K	0.25K	39	*QFP044-P-1010E(Pb Free) SDIP042-P-0600C(Pb Free) TQFP048-P-0707B(Pb Free)
<a href="#">MN101C427</a>	16K	0.5K	39	*QFP044-P-1010E(Pb Free) SDIP042-P-0600C(Pb Free) TQFP048-P-0707B(Pb Free)
<a href="#">MN101C457</a>	16K	0.5K	37	*QFP044-P-1010E(Pb Free)
<a href="#">MN101C46F</a>	96K	3K	35	SDIP042-P-0600C(Pb Free)
<a href="#">MN101C47C</a>	48K	1.5K	35	SDIP042-P-0600C(Pb Free)
<a href="#">MN101C47D</a>	64K	2K	35	LQFP064-P-1414(Pb Free) SDIP042-P-0600C(Pb Free)
<a href="#">MN101C485</a>	8K	0.5K	47	LQFP064-P-1414(Pb Free) TQFP064-P-1010B(Pb Free)

<a href="#">MN101C487</a>	16K	0.5K	47	LQFP064-P-1414(Pb Free) TQFP064-P-1010B(Pb Free)
<a href="#">MN101C49G</a>	128K	4K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C49H</a>	160K	6K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C49K</a>	224K	10K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C539</a>	24K	0.5K	40	TQFP048-P-0707B(Pb Free)
<a href="#">MN101C54A</a>	32K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C54C</a>	48K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C57C</a>	48K	2K	83	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C57D</a>	64K	2K	83	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C589</a>	24K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101C58A</a>	32K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101C61D</a>	64K	3K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C61G</a>	128K	12K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C62D</a>	64K	2K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C62F</a>	96K	4K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C66D</a>	64K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C66G</a>	128K	4K	65	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C67D</a>	64K	6K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C67G</a>	128K	10K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C70C</a>	48K	2K	66	LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C73A</a>	32K	1.5K	55	
<a href="#">MN101C74F</a>	96K	6K	87	
<a href="#">MN101C74G</a>	128K	6K	87	
<a href="#">MN101C77A</a>	32K	1.5K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77C</a>	48K	3K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77D</a>	64K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77F</a>	96K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C78A</a>	32K	1.5K	39	TQFP048-P-0707B(Pb Free)

<a href="#">MN101C84A</a>	32K	1K	56	
<a href="#">MN101C87A</a>	32K	1.5K	52	
<a href="#">MN101C87D</a>	64K	2K	52	
<a href="#">MN101C88D</a>	64K	2K	88	
<a href="#">MN101C88F</a>	96K	4K	88	
<a href="#">MN101C88G</a>	128K	4K	88	
<a href="#">MN101C93K</a>	224K	6K	84	LQFP100-P-1414(Pb Free)
<a href="#">MN101C94A</a>	32K	1K	37	
<a href="#">MN101C97A</a>	32K	1K	38	TQFP048-P-0707B(Pb Free)
<a href="#">MN101C97D</a>	64K	1K	38	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CF46F</a>	96K	3K	35	LQFP064-P-1414(Pb Free)
<a href="#">MN101CF49K</a>	224K	10K	88	*QFP084-P-1818E(Pb Free)
<a href="#">MN101CF54D</a>	64K	2K	65	
<a href="#">MN101CF57D</a>	64K	2K	83	
<a href="#">MN101CF58D</a>	64K	2K	49	
<a href="#">MN101CF60G</a>	128K	12K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF61G</a>	128K	12K	68	
<a href="#">MN101CF62G</a>	128K	10K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CF66G</a>	128K	4K	65	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CF67G</a>	128K	10K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF70D</a>	64K	4K	66	
<a href="#">MN101CF73A</a>	32K	2K	55	
<a href="#">MN101CF74G</a>	128K	6K	87	
<a href="#">MN101CF77G</a>	128K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101CF78A</a>	32K	1.5K	39	
<a href="#">MN101CF84D</a>	64K	2K	56	
<a href="#">MN101CF87G</a>	128K	4K	52	
<a href="#">MN101CF88G</a>	128K	10K	88	
<a href="#">MN101CF91D</a>	64K	4K	37	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CF93K</a>	224K	6K	84	
<a href="#">MN101CF94D</a>	64K	2K	37	
<a href="#">MN101CF95F</a>	96K	4K	67	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF95G</a>	128K	6K	67	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF97D</a>	64K	1K	38	

<a href="#">MN101CP28D</a>	64K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free)
<a href="#">MN101CP28L</a>	96K	10K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CP30A</a>	32K	1.5K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP38C</a>	48K	2K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101CP39C</a>	48K	2K	61	
<a href="#">MN101CP427</a>	16K	0.5K	39	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CP487</a>	16K	0.5K	47	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP49K</a>	224K	10K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101CP539</a>	24K	0.5K	40	
<a href="#">MN101CP54C</a>	48K	2K	65	
<a href="#">MN101CP58A</a>	32K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP66D</a>	64K	2K	65	
<a href="#">MN101D06F</a>	96K	3K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D06G</a>	128K	4K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D06H</a>	160K	5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D07G</a>	128K	4K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101D07H</a>	160K	5K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101D08E</a>	80K	2K	57	LQFP080-P-1414A(Pb Free)
<a href="#">MN101D09E</a>	80K	2K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D10F</a>	96K	2.5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D10G</a>	128K	3.5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF06Z</a>	224K	6K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF07Z</a>	224K	6K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101DF08G</a>	128K	4K	57	LQFP080-P-1414A(Pb Free)
<a href="#">MN101DF09G</a>	128K	4K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF10G</a>	128K	4K	77	
<a href="#">MN101E01J</a>	192K	10K	84	
<a href="#">MN101E01K</a>	256K	10K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E01L</a>	320K	14K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E01M</a>	384K	20K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E02H</a>	160K	16K	35	
<a href="#">MN101E04G</a>	128K	4K	30	*QFP084-P-1818E(Pb Free)
<a href="#">MN101E11G</a>	128K	4K	30	*QFP084-P-1818E(Pb Free)

<a href="#">MN101E13G</a>	128K	4K	35	*QFP084-P-1818E(Pb Free)
<a href="#">MN101E16G</a>	128K	4K	85	
<a href="#">MN101E16K</a>	256K	12K	85	
<a href="#">MN101E16M</a>	384K	20K	85	
<a href="#">MN101E29G</a>	128K	6K	90	
<a href="#">MN101E30N</a>	508K	8K	85	
<a href="#">MN101E31D</a>	64K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101E31G</a>	128K	6K	70	
<a href="#">MN101E32D</a>	64K	4K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101E33G</a>	128K	6K	85	
<a href="#">MN101E33K</a>	256K	12K	85	
<a href="#">MN101EF01M</a>	384K	24K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101EF02K</a>	160K	16K	35	
<a href="#">MN101EF04G</a>	128K	4K	30	
<a href="#">MN101EF11G</a>	128K	4K	30	
<a href="#">MN101EF13G</a>	128K	4K	35	
<a href="#">MN101EF16N</a>	512K	30K	85	
<a href="#">MN101EF29G</a>	128K	6K	90	
<a href="#">MN101EF30R</a>	928K	8K	85	
<a href="#">MN101EF31D</a>	64K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101EF31G</a>	128K	6K	70	
<a href="#">MN101EF32D</a>	64K	4K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101EF33N</a>	512K	30K	85	
<a href="#">MN101EF34D</a>	64K+4K	4K	39	
<a href="#">MN101EF35D</a>	64K+4K	4K	37	

# Advanced Matsushita



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## MN101

*MN101C MN101D  
MN101E*

### AM1(MN101)

8-bit microcomputers, offering small coding size by the 8-bit optimization architecture, such as instruction set of Half Byte.

They can be used in a wide variety of applications where cost performance is a demand.

## MN102

*MN102B MN102L  
MN102H*

### AM2(MN102)

With the simple architecture, performing basic instructions at a rate of 1 byte per cycle, 16-bit microcomputers achieves

high-speed operation. The equipment-oriented microcomputers demonstrate high realtime performance.

## MN103

*MN1030 MN103S MN103E*

### AM3(MN103)

32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

## MN1B (AMMP)

*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

### MN1500

The MN1500 Series could be called the standard for 4-bit microcomputers. Providing numerous peripheral functions, it meets wider range of applications.

## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*

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(For Search)

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 [Microcomputer](#)
 [8bit](#)
 [General Purpose](#)
 [16bit](#)
 [General Purpose](#)
 [32bit](#)
 [Image Sensor](#)
 [General-Purpose Linear](#)
[IC](#)
 [Semiconductor Sensor](#)
 [MortorDrive](#)
 [For LCD](#)
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 [Composite Device](#)
 [Power Device](#)
 [GaAs device](#)
 [Opto-Electronic Device](#)
 [For Video-Audio](#)
 [For](#)
[Information-Communication](#)
 [Interface](#)
 [Others](#)

### Microcomputer - 16bit - General Purpose

Matsushita unified part number (Conventional part number)	ROM (×8-bit)	RAM (×8-bit)	I/O (Pins)	Package
<a href="#">MN102H460B</a>	External	4K	72	LQFP128-P-1818C(Pb Free) TQFP128-P-1414B(Pb Free)
<a href="#">MN102H60G</a>	128K	4K	82	LQFP100-P-1414(Pb Free)
<a href="#">MN102H60K</a>	256K	10K	82	LQFP100-P-1414(Pb Free)
<a href="#">MN102H730FGT</a>		10K	105	
<a href="#">MN102H73G</a>	128K	10K	105	TQFP128-P-1414B(Pb Free)
<a href="#">MN102H73K</a>	256K	12K	105	TQFP128-P-1414B(Pb Free)
<a href="#">MN102H74D</a>	64K	4K	77	LQFP100-P-1414(Pb Free)
<a href="#">MN102H74G</a>	128K	4K	77	LQFP100-P-1414(Pb Free)
<a href="#">MN102H75K</a>	256K	8K	66	*QFP084-P-1818E(Pb Free)
<a href="#">MN102H85K</a>	256K	8K	50	SDIP064-P-0750C(Pb Free)
<a href="#">MN102H90M</a>	384K	20K	111	*QFP160-P-2828F(Pb Free)
<a href="#">MN102H950F</a>	External	10K	63	LQFP100-P-1414(Pb Free)
<a href="#">MN102HF60G</a>	128K	4K	82	LQFP080-P-1414A(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN102HF60K</a>	256K	10K	82	LQFP100-P-1414(Pb Free)
<a href="#">MN102HF73G</a>	128K	10K	105	
<a href="#">MN102HF73K</a>	256K	12K	105	
<a href="#">MN102HF74G</a>	128K	4K	77	
<a href="#">MN102HF75K</a>	256K	8K	66	*QFP084-P-1818E(Pb Free)
<a href="#">MN102HF85K</a>	256K	8K	50	SDIP064-P-0750C(Pb Free)
<a href="#">MN102L35G</a>	144K	5K	50	SDIP064-P-0750C(Pb Free)
<a href="#">MN102L59D</a>	64K	2K	52	LQFP064-P-1414(Pb Free)
<a href="#">MN102LF59D</a>	64K	2K	52	LQFP064-P-1414(Pb Free)
<a href="#">MN102LP35G</a>	144K	5K	50	



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## MN101

*MN101C MN101D  
MN101E*

### AM1(MN101)

8-bit microcomputers, offering small coding size by the 8-bit optimization architecture, such as instruction set of Half Byte. They can be used in a wide variety of applications where cost performance is a demand.

## MN102

*MN102B MN102L  
MN102H*

### AM2(MN102)

With the simple architecture, performing basic instructions at a rate of 1 byte per cycle, 16-bit microcomputers achieves high-speed operation. The equipment-oriented microcomputers demonstrate high realtime performance.

## MN103

*MN1030 MN103S MN103E*

### AM3(MN103)

32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

## MN1B (AMMP)

*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

### MN1500

The MN1500 Series could be called the standard for 4-bit microcomputers. Providing numerous peripheral functions, it meets wider range of applications.

## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*



## MN102L Series Products

- ▶ Click a size of the publication (PDF) to view.
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Name of manual	Pub.No.	Issued-Ver.	PDF
MN1020019/0219/0419/0819 User's Manual	22219-022E	1999.12-2.2	<a href="#">1634 KB</a>
MN102L59D/59C/F59D User's Manual	22259-010E	2001.1-1	<a href="#">1117 KB</a>
MN102L610B/F61G LSI User's Manual	22261-011E	2002.5-1.1	<a href="#">1450 KB</a>
MN102L2503/25A/25D/25Z/25G/F25Z LSI User's Manual MN102L490A LSI User's Manual MN102L62D/62F/62G LSI User's Manual	22262-010E	2000.5-1	<a href="#">1200 KB</a>
MN102L Series LSI User's Manual	22299-030E	2001.3-3	<a href="#">390 KB</a>
MN102LF59D Onboard Serial Programming Manual	3225991-010E	2004.3-1	<a href="#">498 KB</a>

# Advanced Matsushita



▶ Please select a product.

## MN101

*MN101C MN101D  
MN101E*

### AM1(MN101)

8-bit microcomputers, offering small coding size by the 8-bit optimization architecture, such as instruction set of Half Byte. They can be used in a wide variety of applications where cost performance is a demand.

## MN102

*MN102B MN102L  
MN102H*

### AM2(MN102)

With the simple architecture, performing basic instructions at a rate of 1 byte per cycle, 16-bit microcomputers achieves high-speed operation. The equipment-oriented microcomputers demonstrate high realtime performance.

## MN103

*MN1030 MN103S MN103E*

### AM3(MN103)

32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

## MN1B (AMMP)

*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

### MN1500

The MN1500 Series could be called the standard for 4-bit microcomputers. Providing numerous peripheral functions, it meets wider range of applications.

## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*

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Matsushita** **→ PanaX Series**  
The First Step for Customers' Innovation - Starting from Power Clean Chip

## *MN1A7 Series Products*

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Name of manual	Pub.No.	Issued-Ver.	PDF
MN1A7T0200 LSI User's Manual	26002-024E	2001.9-2.4	<a href="#">1235 KB</a>

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-  [Microcomputer](#)
-  [8bit](#)
  -  [General Purpose](#)
  -  [16bit](#)
  -  [General Purpose](#)
  -  [32bit](#)
  -  [General Purpose](#)
-  [Image Sensor](#)
-  [General-Purpose Linear IC](#)
-  [Semiconductor Sensor](#)
-  [MortorDrive](#)
-  [For LCD](#)
-  [Small-signal device](#)
-  [Composite Device](#)
-  [Power Device](#)
-  [GaAs device](#)
-  [Opto-Electronic Device](#)
-  [For Video-Audio](#)
-  [For Information-Communication](#)
-  [Interface](#)
  -  [Others](#)

## Microcomputer - 32bit - General Purpose

Matsushita unified part number (Conventional part number)	I/O (Pins)	Package
<a href="#">MN103E010HRA</a>	34	*BGA292-P-2727
<a href="#">MN103E040HYB</a>	34	FLGA424-C-1717
<a href="#">MN103E0600YD</a>	19	MLGA239-C-1111
<a href="#">MN103S52G</a>	72	*QFP100-P-1818B(Pb Free)
<a href="#">MN103S57G</a>	73	LQFP100-P-1414(Pb Free)
<a href="#">MN103S65G</a>	60	LQFP080-P-1414A(Pb Free)
<a href="#">MN103S83D</a>	60	*QFP084-P-1818E(Pb Free)
<a href="#">MN103S927</a>	49	LQFP064-P-1414(Pb Free)
<a href="#">MN103S97N</a>	195	
<a href="#">MN103SA2N</a>	82	
<a href="#">MN103SA5K</a>	81	
<a href="#">MN103SA7D</a>	61	
<a href="#">MN103SA7G</a>	61	
<a href="#">MN103SB5K</a>	42	LQFP064-P-1414(Pb Free)
<a href="#">MN103SB9N</a>	104	
<a href="#">MN103SC2A</a>	29	
<a href="#">MN103SF52G</a>	72	*QFP100-P-1818B(Pb Free)
<a href="#">MN103SF57G</a>	73	
<a href="#">MN103SF65G</a>	60	
<a href="#">MN103SF66R</a>	195	
<a href="#">MN103SF73N</a>	81	
<a href="#">MN103SF73R</a>	81	
<a href="#">MN103SF92G</a>	49	
<a href="#">MN103SFA2N</a>	82	

<a href="#">MN103SFA2R</a>	82	
<a href="#">MN103SFA5K</a>	81	
<a href="#">MN103SFA7K</a>	61	
<a href="#">MN103SFB5K</a>	42	LQFP064-P-1414(Pb Free)
<a href="#">MN103SFB9R</a>	104	
<a href="#">MN103SFC2D</a>	29	
<a href="#">MN103SFC6K</a>	81	

# Advanced Matsushita



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## MN101

*MN101C MN101D  
MN101E*

### AM1(MN101)

8-bit microcomputers, offering small coding size by the 8-bit optimization architecture, such as instruction set of Half Byte.

They can be used in a wide variety of applications where cost performance is a demand.

## MN102

*MN102B MN102L  
MN102H*

### AM2(MN102)

With the simple architecture, performing basic instructions at a rate of 1 byte per cycle, 16-bit microcomputers achieves

high-speed operation. The equipment-oriented microcomputers demonstrate high realtime performance.

## MN103

*MN1030 MN103S MN103E*

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32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

## MN1B (AMMP)

*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

### MN1500

The MN1500 Series could be called the standard for 4-bit microcomputers. Providing numerous peripheral functions, it meets wider range of applications.

## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*

# Advanced Matsushita



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- ▶ The publications with EXE format are compressed data with self-extracting, including more than one PDF document. Just double-click to open them. (Windows Only)

Name of manual	Pub.No.	Issued-Ver.	PDF
MN1872423/3223/4023/4823 LSI User's Manual	21223-010E	1996.10-1	<a href="#">5207 KB</a>

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- 8bit

- General Purpose

- 16bit

- 32bit

- Image Sensor

- General-Purpose Linear

- IC

- Semiconductor Sensor

- Motor Drive

- For LCD

- Small-signal device

- Composite Device

- Power Device

- GaAs device

- Opto-Electronic Device

- For Video-Audio

- For

- Information-Communication

- Interface

- Others

## Microcomputer - 8bit - General Purpose

Matsushita unified part number (Conventional part number)	ROM (×8-bit)	RAM (×8-bit)	I/O (Pins)	Package
<a href="#">MN101C28A</a>	32K	1.5K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28C</a>	48K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28D</a>	64K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28F</a>	96K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C28L</a>	96K	10K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C309</a>	24K	1K	54	LQFP064-P-1414(Pb Free) SDIP064-P-0750C(Pb Free)
<a href="#">MN101C30A</a>	32K	1.5K	54	LQFP064-P-1414(Pb Free) SDIP064-P-0750C(Pb Free)
<a href="#">MN101C38A</a>	32K	1.5K	57	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C38C</a>	48K	2K	57	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C39C</a>	48K	2K	61	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C425</a>	8K	0.25K	39	*QFP044-P-1010E(Pb Free) SDIP042-P-0600C(Pb Free) TQFP048-P-0707B(Pb Free)
<a href="#">MN101C427</a>	16K	0.5K	39	*QFP044-P-1010E(Pb Free) SDIP042-P-0600C(Pb Free) TQFP048-P-0707B(Pb Free)
<a href="#">MN101C457</a>	16K	0.5K	37	*QFP044-P-1010E(Pb Free)
<a href="#">MN101C46F</a>	96K	3K	35	SDIP042-P-0600C(Pb Free)
<a href="#">MN101C47C</a>	48K	1.5K	35	SDIP042-P-0600C(Pb Free)
<a href="#">MN101C47D</a>	64K	2K	35	LQFP064-P-1414(Pb Free) SDIP042-P-0600C(Pb Free)
<a href="#">MN101C485</a>	8K	0.5K	47	LQFP064-P-1414(Pb Free) TQFP064-P-1010B(Pb Free)

<a href="#">MN101C487</a>	16K	0.5K	47	LQFP064-P-1414(Pb Free) TQFP064-P-1010B(Pb Free)
<a href="#">MN101C49G</a>	128K	4K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C49H</a>	160K	6K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C49K</a>	224K	10K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C539</a>	24K	0.5K	40	TQFP048-P-0707B(Pb Free)
<a href="#">MN101C54A</a>	32K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C54C</a>	48K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C57C</a>	48K	2K	83	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C57D</a>	64K	2K	83	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C589</a>	24K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101C58A</a>	32K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101C61D</a>	64K	3K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C61G</a>	128K	12K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C62D</a>	64K	2K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C62F</a>	96K	4K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C66D</a>	64K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C66G</a>	128K	4K	65	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C67D</a>	64K	6K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C67G</a>	128K	10K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C70C</a>	48K	2K	66	LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C73A</a>	32K	1.5K	55	
<a href="#">MN101C74F</a>	96K	6K	87	
<a href="#">MN101C74G</a>	128K	6K	87	
<a href="#">MN101C77A</a>	32K	1.5K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77C</a>	48K	3K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77D</a>	64K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77F</a>	96K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C78A</a>	32K	1.5K	39	TQFP048-P-0707B(Pb Free)

<a href="#">MN101C84A</a>	32K	1K	56	
<a href="#">MN101C87A</a>	32K	1.5K	52	
<a href="#">MN101C87D</a>	64K	2K	52	
<a href="#">MN101C88D</a>	64K	2K	88	
<a href="#">MN101C88F</a>	96K	4K	88	
<a href="#">MN101C88G</a>	128K	4K	88	
<a href="#">MN101C93K</a>	224K	6K	84	LQFP100-P-1414(Pb Free)
<a href="#">MN101C94A</a>	32K	1K	37	
<a href="#">MN101C97A</a>	32K	1K	38	TQFP048-P-0707B(Pb Free)
<a href="#">MN101C97D</a>	64K	1K	38	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CF46F</a>	96K	3K	35	LQFP064-P-1414(Pb Free)
<a href="#">MN101CF49K</a>	224K	10K	88	*QFP084-P-1818E(Pb Free)
<a href="#">MN101CF54D</a>	64K	2K	65	
<a href="#">MN101CF57D</a>	64K	2K	83	
<a href="#">MN101CF58D</a>	64K	2K	49	
<a href="#">MN101CF60G</a>	128K	12K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF61G</a>	128K	12K	68	
<a href="#">MN101CF62G</a>	128K	10K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CF66G</a>	128K	4K	65	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CF67G</a>	128K	10K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF70D</a>	64K	4K	66	
<a href="#">MN101CF73A</a>	32K	2K	55	
<a href="#">MN101CF74G</a>	128K	6K	87	
<a href="#">MN101CF77G</a>	128K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101CF78A</a>	32K	1.5K	39	
<a href="#">MN101CF84D</a>	64K	2K	56	
<a href="#">MN101CF87G</a>	128K	4K	52	
<a href="#">MN101CF88G</a>	128K	10K	88	
<a href="#">MN101CF91D</a>	64K	4K	37	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CF93K</a>	224K	6K	84	
<a href="#">MN101CF94D</a>	64K	2K	37	
<a href="#">MN101CF95F</a>	96K	4K	67	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF95G</a>	128K	6K	67	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF97D</a>	64K	1K	38	

<a href="#">MN101CP28D</a>	64K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free)
<a href="#">MN101CP28L</a>	96K	10K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CP30A</a>	32K	1.5K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP38C</a>	48K	2K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101CP39C</a>	48K	2K	61	
<a href="#">MN101CP427</a>	16K	0.5K	39	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CP487</a>	16K	0.5K	47	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP49K</a>	224K	10K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101CP539</a>	24K	0.5K	40	
<a href="#">MN101CP54C</a>	48K	2K	65	
<a href="#">MN101CP58A</a>	32K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP66D</a>	64K	2K	65	
<a href="#">MN101D06F</a>	96K	3K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D06G</a>	128K	4K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D06H</a>	160K	5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D07G</a>	128K	4K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101D07H</a>	160K	5K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101D08E</a>	80K	2K	57	LQFP080-P-1414A(Pb Free)
<a href="#">MN101D09E</a>	80K	2K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D10F</a>	96K	2.5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D10G</a>	128K	3.5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF06Z</a>	224K	6K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF07Z</a>	224K	6K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101DF08G</a>	128K	4K	57	LQFP080-P-1414A(Pb Free)
<a href="#">MN101DF09G</a>	128K	4K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF10G</a>	128K	4K	77	
<a href="#">MN101E01J</a>	192K	10K	84	
<a href="#">MN101E01K</a>	256K	10K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E01L</a>	320K	14K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E01M</a>	384K	20K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E02H</a>	160K	16K	35	
<a href="#">MN101E04G</a>	128K	4K	30	*QFP084-P-1818E(Pb Free)
<a href="#">MN101E11G</a>	128K	4K	30	*QFP084-P-1818E(Pb Free)

<a href="#">MN101E13G</a>	128K	4K	35	*QFP084-P-1818E(Pb Free)
<a href="#">MN101E16G</a>	128K	4K	85	
<a href="#">MN101E16K</a>	256K	12K	85	
<a href="#">MN101E16M</a>	384K	20K	85	
<a href="#">MN101E29G</a>	128K	6K	90	
<a href="#">MN101E30N</a>	508K	8K	85	
<a href="#">MN101E31D</a>	64K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101E31G</a>	128K	6K	70	
<a href="#">MN101E32D</a>	64K	4K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101E33G</a>	128K	6K	85	
<a href="#">MN101E33K</a>	256K	12K	85	
<a href="#">MN101EF01M</a>	384K	24K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101EF02K</a>	160K	16K	35	
<a href="#">MN101EF04G</a>	128K	4K	30	
<a href="#">MN101EF11G</a>	128K	4K	30	
<a href="#">MN101EF13G</a>	128K	4K	35	
<a href="#">MN101EF16N</a>	512K	30K	85	
<a href="#">MN101EF29G</a>	128K	6K	90	
<a href="#">MN101EF30R</a>	928K	8K	85	
<a href="#">MN101EF31D</a>	64K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101EF31G</a>	128K	6K	70	
<a href="#">MN101EF32D</a>	64K	4K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101EF33N</a>	512K	30K	85	
<a href="#">MN101EF34D</a>	64K+4K	4K	39	
<a href="#">MN101EF35D</a>	64K+4K	4K	37	

# Advanced Matsushita



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## MN101

*MN101C MN101D  
MN101E*

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*MN102B MN102L  
MN102H*

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## MN103

*MN1030 MN103S MN103E*

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32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

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*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

### MN1500

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## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*

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-  [Image Sensor](#)
-  [General-Purpose Linear IC](#)
-  [Semiconductor Sensor](#)
-  [MortorDrive](#)
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-  [Composite Device](#)
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-  [GaAs device](#)
-  [Opto-Electronic Device](#)
-  [For Video-Audio](#)
-  [For Information-Communication](#)
-  [Interface](#)
  -  [Others](#)

## Microcomputer - 32bit - General Purpose

Matsushita unified part number (Conventional part number)	I/O (Pins)	Package
<a href="#">MN103E010HRA</a>	34	*BGA292-P-2727
<a href="#">MN103E040HYB</a>	34	FLGA424-C-1717
<a href="#">MN103E0600YD</a>	19	MLGA239-C-1111
<a href="#">MN103S52G</a>	72	*QFP100-P-1818B(Pb Free)
<a href="#">MN103S57G</a>	73	LQFP100-P-1414(Pb Free)
<a href="#">MN103S65G</a>	60	LQFP080-P-1414A(Pb Free)
<a href="#">MN103S83D</a>	60	*QFP084-P-1818E(Pb Free)
<a href="#">MN103S927</a>	49	LQFP064-P-1414(Pb Free)
<a href="#">MN103S97N</a>	195	
<a href="#">MN103SA2N</a>	82	
<a href="#">MN103SA5K</a>	81	
<a href="#">MN103SA7D</a>	61	
<a href="#">MN103SA7G</a>	61	
<a href="#">MN103SB5K</a>	42	LQFP064-P-1414(Pb Free)
<a href="#">MN103SB9N</a>	104	
<a href="#">MN103SC2A</a>	29	
<a href="#">MN103SF52G</a>	72	*QFP100-P-1818B(Pb Free)
<a href="#">MN103SF57G</a>	73	
<a href="#">MN103SF65G</a>	60	
<a href="#">MN103SF66R</a>	195	
<a href="#">MN103SF73N</a>	81	
<a href="#">MN103SF73R</a>	81	
<a href="#">MN103SF92G</a>	49	
<a href="#">MN103SFA2N</a>	82	



<a href="#">MN103SFA2R</a>	82	
<a href="#">MN103SFA5K</a>	81	
<a href="#">MN103SFA7K</a>	61	
<a href="#">MN103SFB5K</a>	42	LQFP064-P-1414(Pb Free)
<a href="#">MN103SFB9R</a>	104	
<a href="#">MN103SFC2D</a>	29	
<a href="#">MN103SFC6K</a>	81	

# Advanced Matsushita



▶ Please select a product.

## MN101

*MN101C MN101D  
MN101E*

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8-bit microcomputers, offering small coding size by the 8-bit optimization architecture, such as instruction set of Half Byte.

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*MN102B MN102L  
MN102H*

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## MN103

*MN1030 MN103S MN103E*

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32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

## MN1B (AMMP)

*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

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## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*

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    - General Purpose
  - 16bit
    - General Purpose
  - 32bit
- Image Sensor
- General-Purpose Linear IC
- Semiconductor Sensor
- MortorDrive
- For LCD
- Small-signal device
- Composite Device
- Power Device
- GaAs device
- Opto-Electronic Device
- For Video-Audio
- For Information-Communication
  - Interface
  - Others

## Microcomputer - 16bit - General Purpose

Matsushita unified part number (Conventional part number)	ROM (×8-bit)	RAM (×8-bit)	I/O (Pins)	Package
<a href="#">MN102H460B</a>	External	4K	72	LQFP128-P-1818C(Pb Free) TQFP128-P-1414B(Pb Free)
<a href="#">MN102H60G</a>	128K	4K	82	LQFP100-P-1414(Pb Free)
<a href="#">MN102H60K</a>	256K	10K	82	LQFP100-P-1414(Pb Free)
<a href="#">MN102H730FGT</a>		10K	105	
<a href="#">MN102H73G</a>	128K	10K	105	TQFP128-P-1414B(Pb Free)
<a href="#">MN102H73K</a>	256K	12K	105	TQFP128-P-1414B(Pb Free)
<a href="#">MN102H74D</a>	64K	4K	77	LQFP100-P-1414(Pb Free)
<a href="#">MN102H74G</a>	128K	4K	77	LQFP100-P-1414(Pb Free)
<a href="#">MN102H75K</a>	256K	8K	66	*QFP084-P-1818E(Pb Free)
<a href="#">MN102H85K</a>	256K	8K	50	SDIP064-P-0750C(Pb Free)
<a href="#">MN102H90M</a>	384K	20K	111	*QFP160-P-2828F(Pb Free)
<a href="#">MN102H950F</a>	External	10K	63	LQFP100-P-1414(Pb Free)
<a href="#">MN102HF60G</a>	128K	4K	82	LQFP080-P-1414A(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN102HF60K</a>	256K	10K	82	LQFP100-P-1414(Pb Free)
<a href="#">MN102HF73G</a>	128K	10K	105	
<a href="#">MN102HF73K</a>	256K	12K	105	
<a href="#">MN102HF74G</a>	128K	4K	77	
<a href="#">MN102HF75K</a>	256K	8K	66	*QFP084-P-1818E(Pb Free)
<a href="#">MN102HF85K</a>	256K	8K	50	SDIP064-P-0750C(Pb Free)
<a href="#">MN102L35G</a>	144K	5K	50	SDIP064-P-0750C(Pb Free)
<a href="#">MN102L59D</a>	64K	2K	52	LQFP064-P-1414(Pb Free)
<a href="#">MN102LF59D</a>	64K	2K	52	LQFP064-P-1414(Pb Free)
<a href="#">MN102LP35G</a>	144K	5K	50	

# Advanced Matsushita



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## MN101

*MN101C MN101D  
MN101E*

### AM1(MN101)

8-bit microcomputers, offering small coding size by the 8-bit optimization architecture, such as instruction set of Half Byte.

They can be used in a wide variety of applications where cost performance is a demand.

## MN102

*MN102B MN102L  
MN102H*

### AM2(MN102)

With the simple architecture, performing basic instructions at a rate of 1 byte per cycle, 16-bit microcomputers achieves

high-speed operation. The equipment-oriented microcomputers demonstrate high realtime performance.

## MN103

*MN1030 MN103S MN103E*

### AM3(MN103)

32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

## MN1B (AMMP)

*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

### MN1500

The MN1500 Series could be called the standard for 4-bit microcomputers. Providing numerous peripheral functions, it meets wider range of applications.

## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*

# Advanced Matsushita



## MN102L Series Products

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Name of manual	Pub.No.	Issued-Ver.	PDF
MN1020019/0219/0419/0819 User's Manual	22219-022E	1999.12-2.2	<a href="#">1634 KB</a>
MN102L59D/59C/F59D User's Manual	22259-010E	2001.1-1	<a href="#">1117 KB</a>
MN102L610B/F61G LSI User's Manual	22261-011E	2002.5-1.1	<a href="#">1450 KB</a>
MN102L2503/25A/25D/25Z/25G/F25Z LSI User's Manual MN102L490A LSI User's Manual MN102L62D/62F/62G LSI User's Manual	22262-010E	2000.5-1	<a href="#">1200 KB</a>
MN102L Series LSI User's Manual	22299-030E	2001.3-3	<a href="#">390 KB</a>
MN102LF59D Onboard Serial Programming Manual	3225991-010E	2004.3-1	<a href="#">498 KB</a>

# Advanced Matsushita



▶ Please select a product.

## MN101

*MN101C MN101D  
MN101E*

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*MN102B MN102L  
MN102H*

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## MN103

*MN1030 MN103S MN103E*

### AM3(MN103)

32-bit microcomputers equipped with the extension calculation command features and On-chip I/O bus. High efficiency and advanced system suit for multimedia applications.

## MN1B (AMMP)

*MN1B00 MN1B01  
MN1B10 MN1B11*

## MN1500

*MN1500/MN15G*

### MN1500

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## MOS LSI

*MN1700  
MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*

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Matsushita** **→ PanaX Series**  
The First Step for Customers' Innovation - Starting from Power Clean Chip

## *MN1A7 Series Products*

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Just double-click to open them. (Windows Only)

Name of manual	Pub.No.	Issued-Ver.	PDF
MN1A7T0200 LSI User's Manual	26002-024E	2001.9-2.4	<a href="#">1235 KB</a>

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Part Number Search

(For Search)

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- 8bit

- General Purpose

- 16bit

- 32bit

- Image Sensor

- General-Purpose Linear

- IC

- Semiconductor Sensor

- Motor Drive

- For LCD

- Small-signal device

- Composite Device

- Power Device

- GaAs device

- Opto-Electronic Device

- For Video-Audio

- For

- Information-Communication

- Interface

- Others

## Microcomputer - 8bit - General Purpose

Matsushita unified part number (Conventional part number)	ROM (×8-bit)	RAM (×8-bit)	I/O (Pins)	Package
<a href="#">MN101C28A</a>	32K	1.5K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28C</a>	48K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28D</a>	64K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C28F</a>	96K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C28L</a>	96K	10K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C309</a>	24K	1K	54	LQFP064-P-1414(Pb Free) SDIP064-P-0750C(Pb Free)
<a href="#">MN101C30A</a>	32K	1.5K	54	LQFP064-P-1414(Pb Free) SDIP064-P-0750C(Pb Free)
<a href="#">MN101C38A</a>	32K	1.5K	57	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C38C</a>	48K	2K	57	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C39C</a>	48K	2K	61	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C425</a>	8K	0.25K	39	*QFP044-P-1010E(Pb Free) SDIP042-P-0600C(Pb Free) TQFP048-P-0707B(Pb Free)
<a href="#">MN101C427</a>	16K	0.5K	39	*QFP044-P-1010E(Pb Free) SDIP042-P-0600C(Pb Free) TQFP048-P-0707B(Pb Free)
<a href="#">MN101C457</a>	16K	0.5K	37	*QFP044-P-1010E(Pb Free)
<a href="#">MN101C46F</a>	96K	3K	35	SDIP042-P-0600C(Pb Free)
<a href="#">MN101C47C</a>	48K	1.5K	35	SDIP042-P-0600C(Pb Free)
<a href="#">MN101C47D</a>	64K	2K	35	LQFP064-P-1414(Pb Free) SDIP042-P-0600C(Pb Free)
<a href="#">MN101C485</a>	8K	0.5K	47	LQFP064-P-1414(Pb Free) TQFP064-P-1010B(Pb Free)



<a href="#">MN101C487</a>	16K	0.5K	47	LQFP064-P-1414(Pb Free) TQFP064-P-1010B(Pb Free)
<a href="#">MN101C49G</a>	128K	4K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C49H</a>	160K	6K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C49K</a>	224K	10K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101C539</a>	24K	0.5K	40	TQFP048-P-0707B(Pb Free)
<a href="#">MN101C54A</a>	32K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C54C</a>	48K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C57C</a>	48K	2K	83	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C57D</a>	64K	2K	83	*QFP100-P-1818B(Pb Free) LQFP100-P-1414(Pb Free)
<a href="#">MN101C589</a>	24K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101C58A</a>	32K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101C61D</a>	64K	3K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C61G</a>	128K	12K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C62D</a>	64K	2K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C62F</a>	96K	4K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C66D</a>	64K	2K	65	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C66G</a>	128K	4K	65	LQFP080-P-1414A(Pb Free)
<a href="#">MN101C67D</a>	64K	6K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C67G</a>	128K	10K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101C70C</a>	48K	2K	66	LQFP080-P-1414A(Pb Free) TQFP080-P-1212D(Pb Free)
<a href="#">MN101C73A</a>	32K	1.5K	55	
<a href="#">MN101C74F</a>	96K	6K	87	
<a href="#">MN101C74G</a>	128K	6K	87	
<a href="#">MN101C77A</a>	32K	1.5K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77C</a>	48K	3K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77D</a>	64K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C77F</a>	96K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101C78A</a>	32K	1.5K	39	TQFP048-P-0707B(Pb Free)

<a href="#">MN101C84A</a>	32K	1K	56	
<a href="#">MN101C87A</a>	32K	1.5K	52	
<a href="#">MN101C87D</a>	64K	2K	52	
<a href="#">MN101C88D</a>	64K	2K	88	
<a href="#">MN101C88F</a>	96K	4K	88	
<a href="#">MN101C88G</a>	128K	4K	88	
<a href="#">MN101C93K</a>	224K	6K	84	LQFP100-P-1414(Pb Free)
<a href="#">MN101C94A</a>	32K	1K	37	
<a href="#">MN101C97A</a>	32K	1K	38	TQFP048-P-0707B(Pb Free)
<a href="#">MN101C97D</a>	64K	1K	38	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CF46F</a>	96K	3K	35	LQFP064-P-1414(Pb Free)
<a href="#">MN101CF49K</a>	224K	10K	88	*QFP084-P-1818E(Pb Free)
<a href="#">MN101CF54D</a>	64K	2K	65	
<a href="#">MN101CF57D</a>	64K	2K	83	
<a href="#">MN101CF58D</a>	64K	2K	49	
<a href="#">MN101CF60G</a>	128K	12K	68	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF61G</a>	128K	12K	68	
<a href="#">MN101CF62G</a>	128K	10K	68	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CF66G</a>	128K	4K	65	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CF67G</a>	128K	10K	69	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF70D</a>	64K	4K	66	
<a href="#">MN101CF73A</a>	32K	2K	55	
<a href="#">MN101CF74G</a>	128K	6K	87	
<a href="#">MN101CF77G</a>	128K	6K	53	LQFP064-P-1414(Pb Free)
<a href="#">MN101CF78A</a>	32K	1.5K	39	
<a href="#">MN101CF84D</a>	64K	2K	56	
<a href="#">MN101CF87G</a>	128K	4K	52	
<a href="#">MN101CF88G</a>	128K	10K	88	
<a href="#">MN101CF91D</a>	64K	4K	37	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CF93K</a>	224K	6K	84	
<a href="#">MN101CF94D</a>	64K	2K	37	
<a href="#">MN101CF95F</a>	96K	4K	67	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF95G</a>	128K	6K	67	TQFP080-P-1212D(Pb Free)
<a href="#">MN101CF97D</a>	64K	1K	38	

<a href="#">MN101CP28D</a>	64K	2K	70	*QFP084-P-1818E(Pb Free) LQFP080-P-1414A(Pb Free)
<a href="#">MN101CP28L</a>	96K	10K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101CP30A</a>	32K	1.5K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP38C</a>	48K	2K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101CP39C</a>	48K	2K	61	
<a href="#">MN101CP427</a>	16K	0.5K	39	TQFP048-P-0707B(Pb Free)
<a href="#">MN101CP487</a>	16K	0.5K	47	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP49K</a>	224K	10K	88	*QFP100-P-1818B(Pb Free)
<a href="#">MN101CP539</a>	24K	0.5K	40	
<a href="#">MN101CP54C</a>	48K	2K	65	
<a href="#">MN101CP58A</a>	32K	1.5K	49	LQFP064-P-1414(Pb Free)
<a href="#">MN101CP66D</a>	64K	2K	65	
<a href="#">MN101D06F</a>	96K	3K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D06G</a>	128K	4K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D06H</a>	160K	5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D07G</a>	128K	4K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101D07H</a>	160K	5K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101D08E</a>	80K	2K	57	LQFP080-P-1414A(Pb Free)
<a href="#">MN101D09E</a>	80K	2K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D10F</a>	96K	2.5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101D10G</a>	128K	3.5K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF06Z</a>	224K	6K	77	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF07Z</a>	224K	6K	87	LQFP112-P-2020(Pb Free)
<a href="#">MN101DF08G</a>	128K	4K	57	LQFP080-P-1414A(Pb Free)
<a href="#">MN101DF09G</a>	128K	4K	57	*QFP100-P-1818B(Pb Free)
<a href="#">MN101DF10G</a>	128K	4K	77	
<a href="#">MN101E01J</a>	192K	10K	84	
<a href="#">MN101E01K</a>	256K	10K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E01L</a>	320K	14K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E01M</a>	384K	20K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101E02H</a>	160K	16K	35	
<a href="#">MN101E04G</a>	128K	4K	30	*QFP084-P-1818E(Pb Free)
<a href="#">MN101E11G</a>	128K	4K	30	*QFP084-P-1818E(Pb Free)

<a href="#">MN101E13G</a>	128K	4K	35	*QFP084-P-1818E(Pb Free)
<a href="#">MN101E16G</a>	128K	4K	85	
<a href="#">MN101E16K</a>	256K	12K	85	
<a href="#">MN101E16M</a>	384K	20K	85	
<a href="#">MN101E29G</a>	128K	6K	90	
<a href="#">MN101E30N</a>	508K	8K	85	
<a href="#">MN101E31D</a>	64K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101E31G</a>	128K	6K	70	
<a href="#">MN101E32D</a>	64K	4K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101E33G</a>	128K	6K	85	
<a href="#">MN101E33K</a>	256K	12K	85	
<a href="#">MN101EF01M</a>	384K	24K	84	*QFP100-P-1818B(Pb Free)
<a href="#">MN101EF02K</a>	160K	16K	35	
<a href="#">MN101EF04G</a>	128K	4K	30	
<a href="#">MN101EF11G</a>	128K	4K	30	
<a href="#">MN101EF13G</a>	128K	4K	35	
<a href="#">MN101EF16N</a>	512K	30K	85	
<a href="#">MN101EF29G</a>	128K	6K	90	
<a href="#">MN101EF30R</a>	928K	8K	85	
<a href="#">MN101EF31D</a>	64K	4K	70	LQFP080-P-1414A(Pb Free)
<a href="#">MN101EF31G</a>	128K	6K	70	
<a href="#">MN101EF32D</a>	64K	4K	54	LQFP064-P-1414(Pb Free)
<a href="#">MN101EF33N</a>	512K	30K	85	
<a href="#">MN101EF34D</a>	64K+4K	4K	39	
<a href="#">MN101EF35D</a>	64K+4K	4K	37	

# Advanced Matsushita



▶ Please select a product.

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*MN101C MN101D  
MN101E*

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MN102H*

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*MN1030 MN103S MN103E*

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*MN1B00 MN1B01  
MN1B10 MN1B11*

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*MN1500/MN15G*

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MN1860 MN1870 MN1880*

## ARM

*MN1A7 MN1A9*

## DSP

*MN1931 MN1932 MN1933  
MN1934 MN1935 MN1940*