

FLASH



EMBEDDED PRODUCTS



DRAM MODULES



Wintec Industries Branches

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[product guide](#)

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About Wintec Industries



About Wintec Industries, Inc.

Wintec Industries, founded in 1988, is headquartered in Milpitas, California. Wintec is a leading ODM/OEM and third party memory module manufacturer which specializes in industry standard and customized memory product designs and manufacturing, including DRAM, NAND, wireless and embedded products. With an experienced engineering and manufacturing team, Wintec provides a wide range of hardware designs, mechanical molding, and manufacturing services for customers from concept stage to final product delivery. Wintec is an ISO9001-certified company and a member of The Joint Electron Device Engineering Council (JEDEC), Compact Flash Association (CFA) and SD Card Association (SDA).

Letter from our CEO

Thank you to all Wintec customers for your support and partnership through the years. Your commitment to building lasting relationships has helped to create the foundation for Wintec's growth and success. With your support, we look forward to leading the way in this continuously changing and challenging industry and to the exciting opportunities ahead.

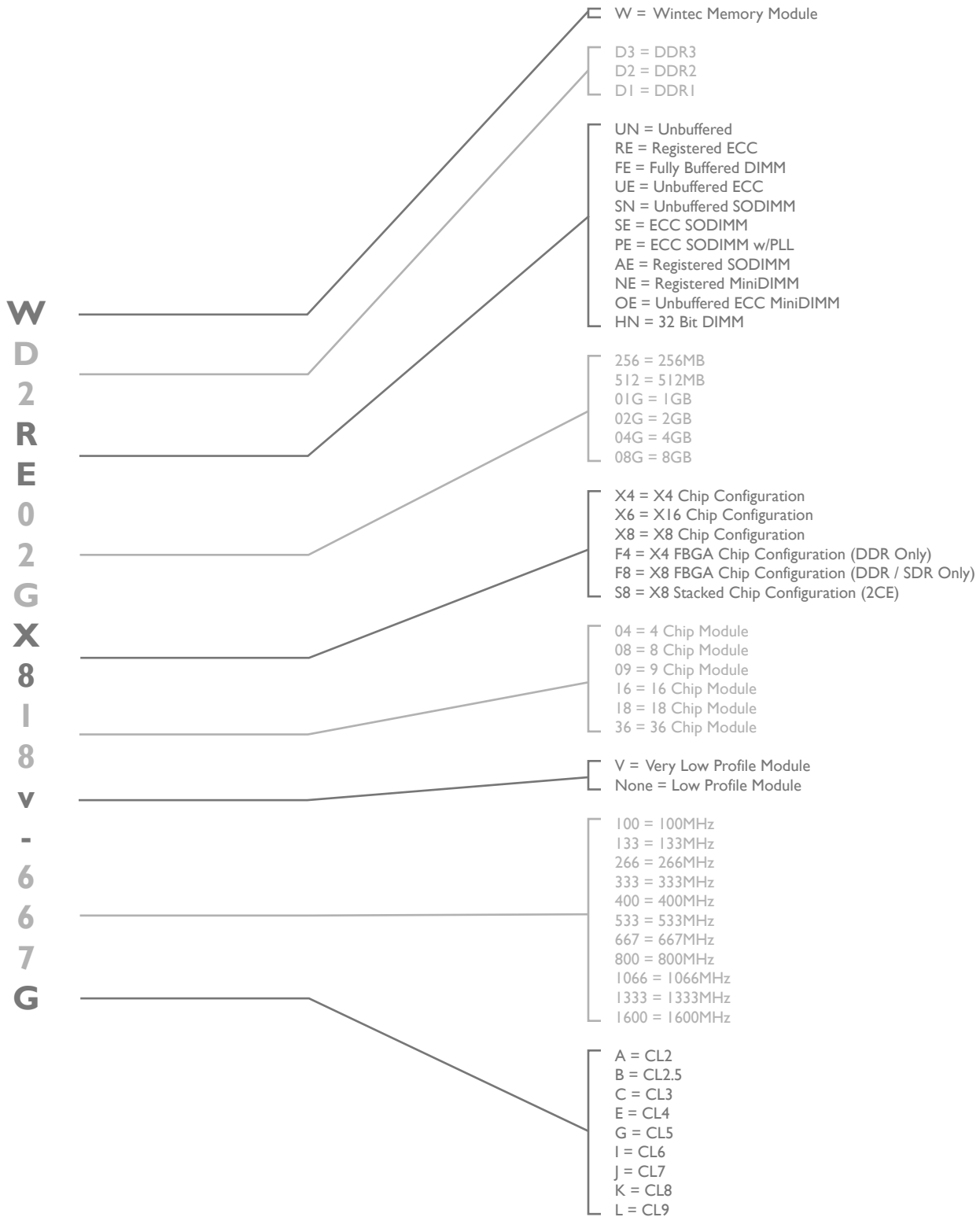
Wintec's legacy is deeply rooted as a memory module manufacturer, and with your support, Wintec memory and flash products have become recognized worldwide. In addition, under the Wintec flagship, we have added and grown a full line of supply chain services and products for distribution.

Wintec is committed to staying on the leading edge by developing and supporting innovative designs. We encourage you to partner with us and our versatile in house engineering team for your next project.

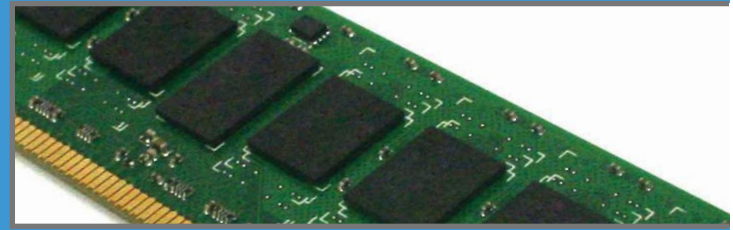
Sincerely,

Donald Yu
CEO, Wintec Industries

Naming Guide DRAM



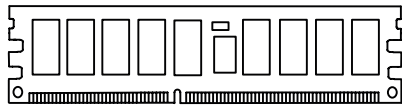
DDR3 DRAM Modules



Registered DDR3 DIMMs – 240-Pin

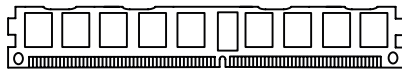
Wintec Industries is a full line manufacturer of DRAM modules, manufacturing industry standard and customized DIMMs from legacy to leading edge. Wintec's 20 years of experience in the memory business and its in-house design team can handle any DRAM related projects, providing products and services to fully meet any customer requirements.

Registered DIMMs – 1.181"

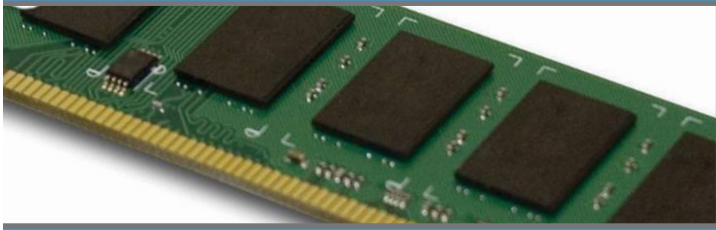


Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
1GB	x8	WD3RE01GX809 - 800I, 1066J, 1333K, 1600L	1	
2GB	x4 x8	WD3RE02GX418 - 800I, 1066J, 1333K, 1600L	1	
		WD3RE02GX809 - 800I, 1066J, 1333K, 1600L	1	
4GB	x4 x8	WD3RE04GS418 - 800I, 1066J, 1333K, 1600L	2	
		WD3RE04GX818 - 800I, 1066J, 1333K, 1600L	2	
8GB	x4	WD3RE08GS418 - 800I, 1066J, 1333K, 1600L	2	

VLP Registered DIMMs – 0.73"



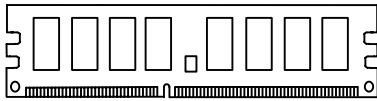
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
1GB	x8	WD3RE01GX809V - 800I, 1066J, 1333K, 1600L	1	
2GB	x4 x8	WD3RE02GX418V - 800I, 1066J, 1333K, 1600L	1	
		WD3RE02GX809V - 800I, 1066J, 1333K, 1600L	1	
4GB	x4 x8	WD3RE04GS418V - 800I, 1066J, 1333K, 1600L	2	
		WD3RE04GX818V - 800I, 1066J, 1333K, 1600L	2	



DRAM Modules DDR3

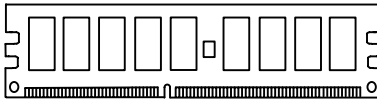
Unbuffered DDR3 DIMMs – 240-Pin

Unbuffered DIMMs – 1.181”



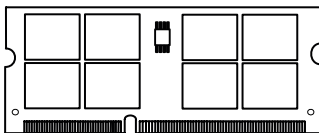
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD3UN512X808 - 800I, 1066J, 1333K, 1600L	1	
1GB	x8 x8	WD3UN01GX808 - 800I, 1066J, 1333K, 1600L	1	
		WD3UN01GX816 - 800I, 1066J, 1333K, 1600L	2	
2GB	x8 x8	WD3UN01GX808 - 800I, 1066J, 1333K, 1600L	1	
		WD3UN02GX816 - 800I, 1066J, 1333K, 1600L	2	
4GB	x8	WD3UN04GX816 - 800I, 1066J, 1333K, 1600L	2	

Unbuffered ECC DIMMs – 1.181”



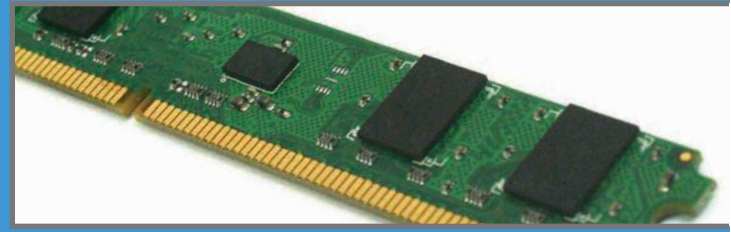
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD3UE512X809 - 800I, 1066J, 1333K, 1600L	1	
1GB	x8 x8	WD3UE01GX809 - 800I, 1066J, 1333K, 1600L	1	
		WD3UE01GX818 - 800I, 1066J, 1333K, 1600L	2	
2GB	x8 x8	WD3UE01GX809 - 800I, 1066J, 1333K, 1600L	1	
		WD3UE02GX818 - 800I, 1066J, 1333K, 1600L	2	
4GB	x8	WD3UE04GX818 - 800I, 1066J, 1333K, 1600L	2	

Unbuffered SoDIMMs – 1.181”



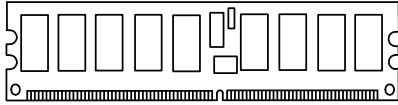
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD3SN512X808 - 800I, 1066J, 1333K, 1600L	1	
1GB	x8 x8	WD3SN01GX808 - 800I, 1066J, 1333K, 1600L	1	
		WD3SN01GX816 - 800I, 1066J, 1333K, 1600L	2	
2GB	x8 x8	WD3SN02GX808 - 800I, 1066J, 1333K, 1600L	1	
		WD3SN02GX816 - 800I, 1066J, 1333K, 1600L	2	
4GB	x8	WD3SN04GX816 - 800I, 1066J, 1333K, 1600L	2	

DDR2 DRAM Modules



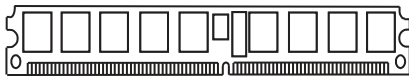
Registered / Fully-Buffered DDR2 DIMMs – 240-Pin

Registered DIMMs – 1.181”



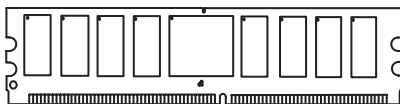
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2RE512X809 - 400C, 533E, 667G, 800G, 800I	1	
1GB	x4	WD2RE01GX418 - 400C, 533E, 667G, 800G, 800I	1	
	x8	WD2RE01GX809 - 400C, 533E, 667G, 800G, 800I	1	
	x8	WD2RE01GX818 - 400C, 533E, 667G, 800G, 800I	2	
2GB	x4	WD2RE02GX418 - 400C, 533E, 667G, 800G, 800I	1	
	x4	WD2RE02GX436 - 400C, 533E, 667G, 800G, 800I	2	
	x8	WD2RE02GX818 - 400C, 533E, 667G, 800G, 800I	2	
4GB	x4	WD2RE04GX418 - 400C, 533E, 667G, 800G, 800I	1	
	x4	WD2RE04GX436 - 400C, 533E, 667G, 800G, 800I	2	
8GB	x4	WD2RE08GS418 - 400C, 533E, 667G, 800G, 800I	2	Stacked

Registered VLP DIMMs – 0.72”

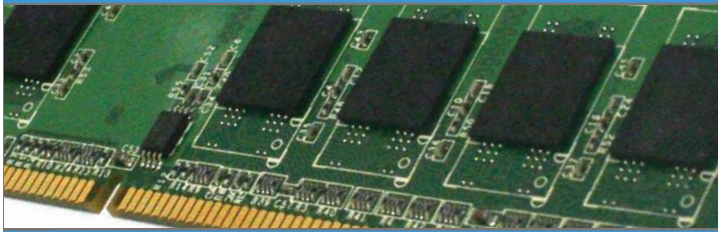


Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2RE512X809V - 400C, 533E, 667G, 800G, 800I	1	
1GB	x4	WD2RE01GX418V - 400C, 533E, 667G, 800G, 800I	1	
	x8	WD2RE01GX818V - 400C, 533E, 667G, 800G, 800I	2	
2GB	x8	WD2RE02GX818V - 400C, 533E, 667G, 800G, 800I	2	
4GB	x4	WD2RE04GS418V - 400C, 533E, 667G, 800G, 800I	2	Stacked
	x8	WD2RE04GS818V - 400C, 533E, 667G, 800G, 800I	4	Stacked

FBDIMMs – 1.181”



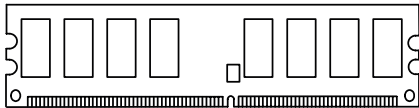
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
1GB	x4	WD2RE01GX418 - 400C, 533E, 667G, 800G, 800I	1	
	x8	WD2RE01GX809 - 400C, 533E, 667G, 800G, 800I	2	
2GB	x4	WD2RE02GX418 - 400C, 533E, 667G, 800G, 800I	1	
	x4	WD2RE02GX436 - 400C, 533E, 667G, 800G, 800I	2	
	x8	WD2RE02GX818 - 400C, 533E, 667G, 800G, 800I	2	
4GB	x4	WD2RE04GX418 - 400C, 533E, 667G, 800G, 800I	1	
	x4	WD2RE04GX436 - 400C, 533E, 667G, 800G, 800I	2	
	x8	WD2RE04GX836 - 400C, 533E, 667G, 800G, 800I	4	
8GB	x4	WD2RE08GS418 - 400C, 533E, 667G, 800G, 800I	2	Stacked
	x8	WD2RE08GX836 - 400C, 533E, 667G, 800G, 800I	4	



DRAM Modules DDR2

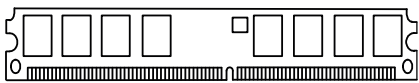
Unbuffered DDR2 DIMMs – 240-Pin

Unbuffered DIMMs – 1.181”



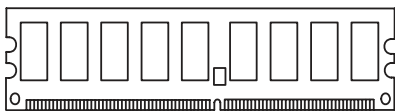
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2UN512X808 - 400C, 533E, 667G, 800I	1	
1GB	x8	WD2UN01GX808 - 400C, 533E, 667G, 800I	1	
	x8	WD2UN01GX816 - 400C, 533E, 667G, 800I	2	
2GB	x8	WD2UN02GX808 - 400C, 533E, 667G, 800I	1	
	x8	WD2UN02GX816 - 400C, 533E, 667G, 800I	2	
4GB	x8	WD2UN04GX816 - 400C, 533E, 667G, 800I	2	

Unbuffered VLP DIMMs – 0.72”



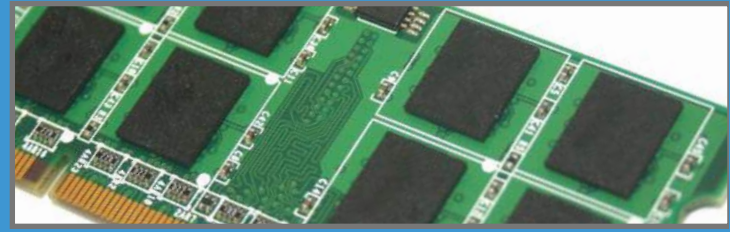
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2UN512X808V - 400C, 533E, 667G, 800I	1	
1GB	x8	WD2UN01GX808V - 400C, 533E, 667G, 800I	1	
2GB	x8	WD2UN02GX816V - 400C, 533E, 667G, 800I	2	

Unbuffered ECC DIMMs – 1.181”



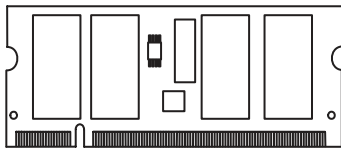
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2UE512X809 - 400C, 533E, 667G, 800I	1	
1GB	x8	WD2UE01GX809 - 400C, 533E, 667G, 800I	1	
	x8	WD2UE01GX818 - 400C, 533E, 667G, 800I	2	
2GB	x8	WD2UE02GX809 - 400C, 533E, 667G, 800I	1	
	x8	WD2UE02GX818 - 400C, 533E, 667G, 800I	2	
4GB	x8	WD2UE04GX818 - 400C, 533E, 667G, 800I	2	

DDR2 DRAM Modules



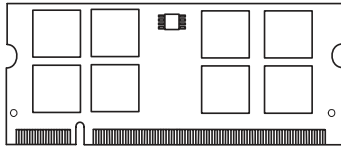
Registered / Unbuffered DDR2 SODIMMs – 200-Pin

Registered ECC SODIMMs – 1.181”



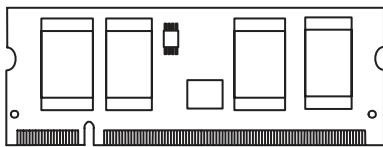
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2AE512X809 - 400C, 533E, 667G, 800G, 800I	1	
1GB	x8	WD2AE01GX809 - 400C, 533E, 667G, 800G, 800I	1	
2GB	x8	WD2AE02GX809 - 400C, 533E, 667G, 800G, 800I	1	
4GB	x8	WD2AE04GS809 - 400C, 533E, 667G, 800G, 800I	2	Stacked

Unbuffered SODIMMs – 1.181”



Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2SN512X808 - 400C, 533E, 667G, 800G, 800I	1	
	x16	WD2SN512X604 - 400C, 533E, 667G, 800G, 800I	1	
1GB	x8	WD2SN01GX808 - 400C, 533E, 667G, 800G, 800I	1	
	x8	WD2SN01GX816 - 400C, 533E, 667G, 800G, 800I	2	
	x16	WD2SN01GX608 - 400C, 533E, 667G, 800G, 800I	2	
2GB	x8	WD2SN02GX816 - 400C, 533E, 667G, 800G, 800I	2	
4GB	x8	WD2SN04GS808 - 400C, 533E, 667G, 800G, 800I	2	Stacked

Unbuffered ECC SODIMMs – 1.181”



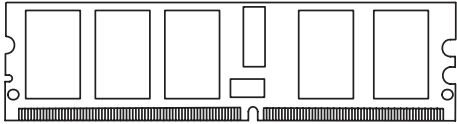
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2PE512X809 - 400C, 533E, 667G, 800G, 800I	1	
1GB	x8	WD2PE01GX809 - 400C, 533E, 667G, 800G, 800I	1	
2GB	x8	WD2PE02GX809 - 400C, 533E, 667G, 800G, 800I	1	
4GB	x8	WD2PE04GS809 - 400C, 533E, 667G, 800G, 800I	2	Stacked



DRAM Modules DDR2

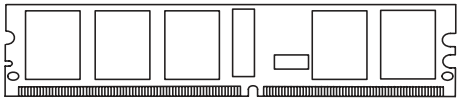
Registered / Unbuffered DDR2 MiniDIMMs – 244-Pin

Registered MiniDIMM – 1.181”



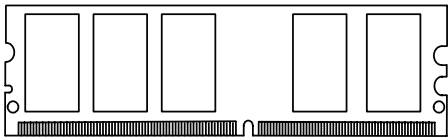
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2NE512X809 - 400C, 533E, 667G	1	
1GB	x8	WD2NE01GX809 - 400C, 533E, 667G	1	
2GB	x8	WD2NE02GX809 - 400C, 533E, 667G	1	
4GB	x8	WD2NE04GS809 - 400C, 533E, 667G	2	

Registered VLP MiniDIMM – 0.72”



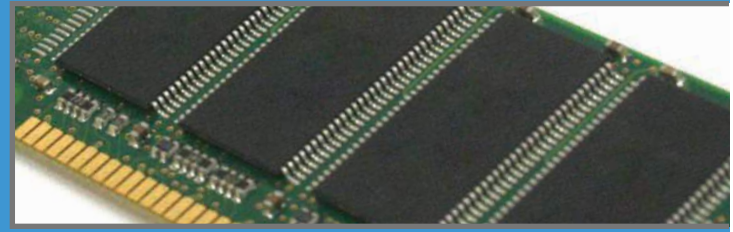
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2NE512X809 - 400C, 533E, 667G	1	
1GB	x8	WD2NE01GX809 - 400C, 533E, 667G	1	
2GB	x8	WD2NE02GS809 - 400C, 533E, 667G	2	

Unbuffered ECC MiniDIMM – 1.181”



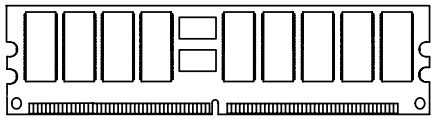
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2OE512X809 - 400C, 533E, 667G, 800I	1	
1GB	x8	WD2OE01GX809 - 400C, 533E, 667G, 800I	1	
2GB	x8	WD2OE02GX809 - 400C, 533E, 667G, 800I	1	

DDR DRAM Modules



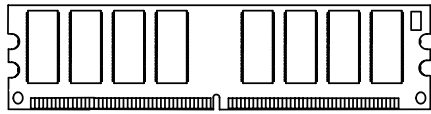
DDR DIMMs – 184/200-Pin

Registered DIMMs – 184 Pin – 1.25”



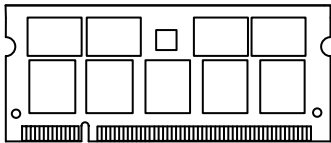
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WDIRE512X809 - 266C, 333C, 400C	2	VLP DIMM, 0.72”
	x8	WDIRE512X818 - 266C, 333C, 400C	2	
	x8	WDIRE512X818V - 266C, 333C, 400C	2	
1GB	x8	WDIRE01GX818 - 266C, 333C, 400C	2	VLP DIMM, 0.72”
	x8	WDIRE01GX818V - 266C, 333C, 400C	2	
2GB	x4	WDIRE02GF436 - 266C, 333C, 400C	2	

UnBuffered DIMMs – 184 Pin – 1.25”



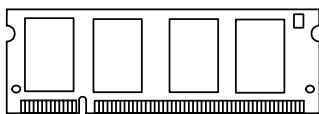
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
256MB	x8	WDIUE256X809 - 266C, 333C, 400C	1	ECC
	x16	WDIUN256X604 - 266C, 333C, 400C	1	
512MB	x8	WDIUN512X808 - 266C, 333C, 400C	1	VLP DIMM 0.8” ECC
	x8	WDIUN512X816 - 266C, 333C, 400C	2	
	x8	WDIUN512X808V - 266C, 333C, 400C	1	
	x8	WDIUE512X809 - 266C, 333C, 400C	1	
1GB	x8	WDIUN01GX816 - 266C, 333C, 400C	2	ECC
	x8	WDIUE01GX816 - 266C, 333C, 400C	2	

Registered SODIMMs – 200 Pin – 1.25”

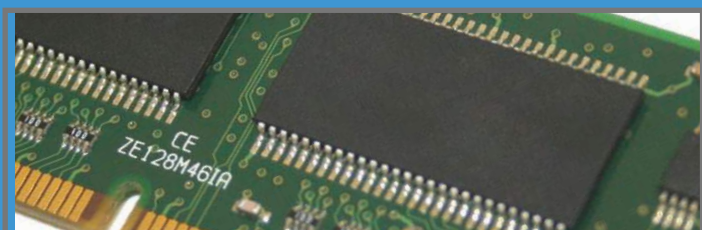


Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WDIAE512X818 - 266C, 333C, 400C	2	
1GB	x8	WDIAE01GX818 - 266C, 333C, 400C	2	

Unbuffered SODIMMs – 200 Pin – 1.25”



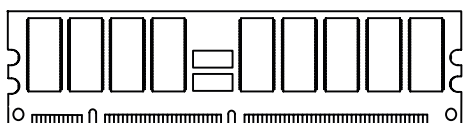
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
256MB	x8	WDISN256X808 - 266C, 333C, 400C	1	
512MB	x8	WDISN512X808 - 266C, 333C, 400C	1	FBGA ECC ECC, FBGA
	x8	WDISN512F808 - 266C, 333C, 400C	1	
	x8	WDIPE512X809 - 266C, 333C, 400C	1	
	x8	WDIPE512F809 - 266C, 333C, 400C	1	
1GB	x8	WDISN01GF816 - 266C, 333C, 400C	2	FBGA ECC, FBGA
	x8	WDIPE01GF818 - 266C, 333C, 400C	2	



DRAM Modules SDR

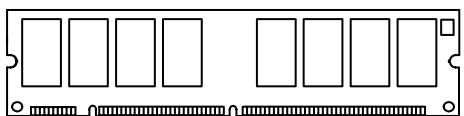
SDR DIMMs – 168/144-Pin

Registered DIMMs – 168 Pin – 1.2”



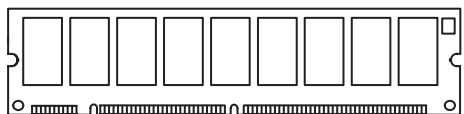
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
128MB	x8	WSDRE128X809 - 100A, 133A, 133C	1	
256MB	x8	WSDRE256X809 - 100A, 133A, 133C	1	
512MB	x8	WSDRE512X818 - 100A, 133A, 133C	2	

Unbuffered DIMMs – 168 Pin – 1.2”



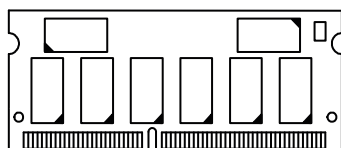
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
64MB	x16	WSDUN064X604 - 100A, 133A, 133C	1	
128MB	x8 x16	WSDUN128X808 - 100A, 133A, 133C WSDUN128X604 - 100A, 133A, 133C	1 1	
256MB	x8 x8	WSDUN256X808 - 100A, 133A, 133C WSDUN256X816 - 100A, 133A, 133C	1 2	
512MB	x8	WSDUN512X816 - 100A, 133A, 133C	2	

Unbuffered ECC DIMMs – 168 Pin – 1.2”



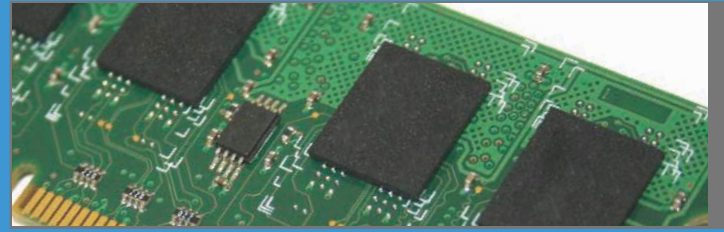
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
128MB	x16	WSDUN128X605 - 100A, 133A, 133C	1	
256MB	x8	WSDUN256X818 - 100A, 133A, 133C	2	
512MB	x8	WSDUN512X818 - 100A, 133A, 133C	2	

Unbuffered SODIMMs – 144 Pin – 1.25”



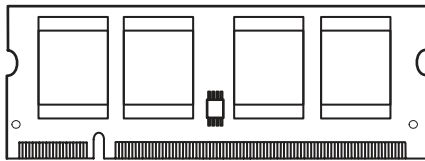
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
64MB	x8 x16	WSDSN064X804 - 100A, 133A, 133C WSDSN064X604 - 100A, 133A, 133C	1 1	
128MB	x8 x16	WSDSN128X808 - 100A, 133A, 133C WSDSN128X604 - 100A, 133A, 133C	1 1	
256MB	x8 x8 x16	WSDSN256X808 - 100A, 133A, 133C WSDSN256X816 - 100A, 133A, 133C WSDSN256X608 - 100A, 133A, 133C	1 2 2	
512MB	x8 x8 x8	WSDSN512S808 - 100A, 133A, 133C WSDSN512X816 - 100A, 133A, 133C WSDSN512F816 - 100A, 133A, 133C	2 2 2	FBGA Package

Specialty DRAM Modules



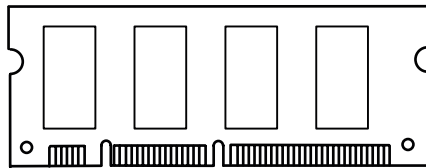
Specialty 32-bit DIMMs – 144/100-Pin

DDR2 144-pin So-DIMM – 1.181”



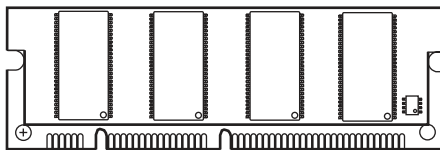
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
512MB	x8	WD2HN512X804 - 400C, 533E, 667G	1	
	x8	WD2HN512X808 - 400C, 533E, 667G	2	
1GB	x8	WD2HN01GX808 - 400C, 533E, 667G	2	
2GB	x8	WD2HN02GX808 - 400C, 533E, 667G	2	

DDR 100-pin SODIMM – 1.2”



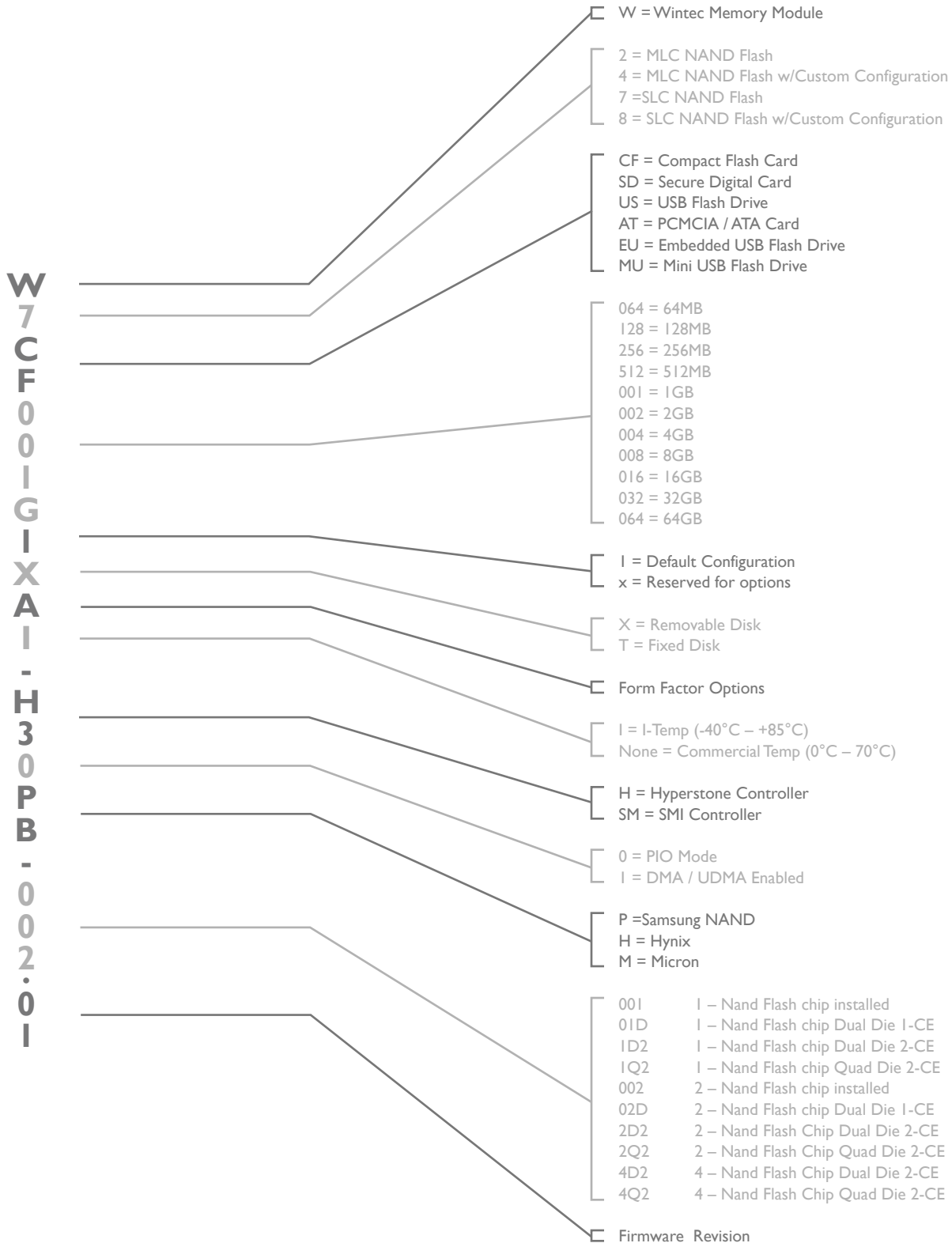
Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
128MB	x8	WD1HN128X804 - 266B, 333B, 400C	1	
256MB	x8	WD1HN256X804 - 266B, 333B, 400C	1	
512MB	x8	WD1HN512X804 - 266B, 333B, 400C	1	

SDR 100-pin SODIMM – 1.25”



Capacity	Org	Part Numbering (PT# - Speed)	Rank	Notes
32MB	x16	WSDHN032X604 - 100A, 133A, 133C	2	
64MB	x16	WSDHN064X604 - 100A, 133A, 133C	2	
128MB	x8	WSDHN128X808 - 100A, 133A, 133C	2	
256MB	x8	WSDHN256X808 - 100A, 133A, 133C	2	

Flash Naming Guide



CF Industrial Flash Disks



Compact Flash Cards (Industrial Grade)

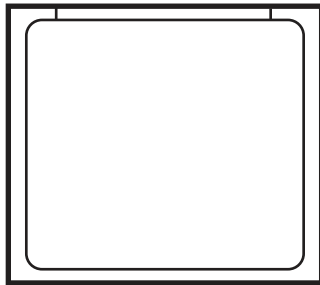
Wintec Industries' RoHS Compliant Industrial Grade Compact Flash Memory Cards, available in capacities from 32MB to 8 GB, provide solid-state data storage that is more robust and consumes less power than disk drives. Constructed using single-level-cell (SLC) NAND flash memory devices paired to a powerful 32-bit RISC/DSP-based system controller for virtual-to-physical address mapping and other flash management functions, these cards employ a variety of sophisticated error checking, wear-leveling and flash management utilities allowing for maximum levels of data reliability and card endurance. Industrial grade reliability, industry standard compatibility, and the ability to emulate IDE hard disk drives make Wintec Compact Flash Cards ideal for industrial, military, and other high endurance applications.

General

- Type I Density up to 8-GB
- Dual 3.3V / 5V Interface
- RoHS 6/6 Compliant
- Data Programming and Custom labeling services available
- Industry standard compatibility (CFA Spec v2.1 PCMCIA PC Card Standard 7.0)

Reliability

- > 2,000,000 Program/Erase Cycles
- Industrial Wear Leveling
 - Includes Static Block Management
- Spares & Bad Block Management
- On-Board ECC
- High Environmental Tolerance
- 10-Year Data Retention
- Unlimited Reads



Card Size	Part Numbering	Capacity (bytes)	Total Sectors/ Card (Max LBA+1)	Cylinders	Heads	Sectors
64MB	W7CF064M1vA(l)-H2wPx-yyy.zz	65,536,000	128,000	1,000	4	32
128MB	W7CF128M1vA(l)-H2wPx-yyy.zz	131,334,144	256,512	1,002	8	32
256MB	W7CF256M1vA(l)-H2wPx-yyy.zz	262,930,432	513,536	1,003	16	32
512MB	W7CF512M1vA(l)-H2wPx-yyy.zz	526,417,920	1,028,160	1,020	16	63
1GB	W7CF001G1vA(l)-H2wPx-yyy.zz	1,054,900,224	2,060,352	2,044	16	63
2GB	W7CF002G1vA(l)-H2wPx-yyy.zz	2,118,057,984	4,136,832	4,104	16	63
4GB	W7CF004G1vA(l)-H2wPx-yyy.zz	4,244,889,600	8,290,800	8,225	16	63
8GB	W7CF008G1vA(l)-H2wPx-yyy.zz	8,455,200,768	16,435,440	16,305	16	63

NOTE:

1. Total Sectors/Card = Sectors/Track * # Heads * # Cylinders
2. Real Capacity = The logical address capacity including the area used for file system and controller overhead.
3. (l) denotes Industrial Temperature option, leave blank for standard Commercial Temp.

- (v) Disk/Interface Options
- (w) UDMA/DMA option
- (x) NAND Die Revision
- (y) Component Flash IC Density
- (z) Firmware Revision/Options

See Flash Naming Guide on Page 13 for further details



Industrial Flash Disks CF

Compact Flash Cards – H3 Series (Industrial Grade)

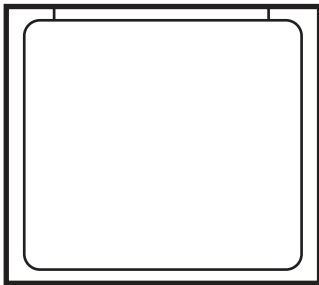
Wintec Industries' H3 Series RoHS Compliant Industrial Grade Compact Flash Memory Cards are the next generation of Industrial Grade Compact Flash cards featuring enhanced speed, reliability and functionality. Available in capacities from 32MB to 16 GB, providing solid-state data storage that is more robust and consumes less power than disk drives. By matching the latest high-speed 32-bit RISC/DSP Controller with high quality SLC NAND, Wintec Industries' H3-Series Compact Flash cards provide superior performance with a dual channel flash interface and UDMA capabilities allowing transfer rates up to 66MB/s. Industrial grade reliability, industry standard compatibility, and the ability to emulate IDE hard disk drives make Wintec Compact Flash Cards ideal for industrial, military, and other high endurance applications.

General

- Type I Density up to 16-GB
- Dual 3.3V / 5V Interface
- RoHS 6/6 Compliant
- Data Programming and Custom labeling services available
- True IDE Mode Capable
 - PIO Mode 0-6
 - MDMA Mode 0-4, UDMA mode 0-4 (Optional)
- High Performance up to 66MB/s
- Low Power Consumption
- Industry standard compatibility (CFA Spec v3.0 PCMCIA PC Card Standard 7.0)

Reliability

- > 2,000,000 Program/Erase Cycles
- Industrial Wear Leveling
 - Includes Static Block Management
- Spares & Bad Block Management
- On-Board ECC
- High Environmental Tolerance
- 10-Year Data Retention
- Unlimited Reads



Card Size	Part Numbering	Capacity (bytes)	Total Sectors/ Card (Max LBA+1)	Cylinders	Heads	Sectors
64MB	W7CF064M1vA(I)-H2wPx-yyy.zz	65,536,000	128,000	1,000	4	32
128MB	W7CF128M1vA(I)-H2wPx-yyy.zz	131,334,144	256,512	1,002	8	32
256MB	W7CF256M1vA(I)-H2wPx-yyy.zz	262,930,432	513,536	1,003	16	32
512MB	W7CF512M1vA(I)-H2wPx-yyy.zz	526,417,920	1,028,160	1,020	16	63
1GB	W7CF001G1vA(I)-H2wPx-yyy.zz	1,054,900,224	2,060,352	2,044	16	63
2GB	W7CF002G1vA(I)-H2wPx-yyy.zz	2,118,057,984	4,136,832	4,104	16	63
4GB	W7CF004G1vA(I)-H2wPx-yyy.zz	4,244,889,600	8,290,800	8,225	16	63
8GB	W7CF008G1vA(I)-H2wPx-yyy.zz	8,455,200,768	16,435,440	16,305	16	63
16GB	W7CF016G1vA(I)-H3wPx-yyy.z	TBA	TBA	TBA	TBA	TBA

NOTE:

1. Total Sectors/Card = Sectors/Track * # Heads * # Cylinders
 2. Capacity = The logical address capacity including the area used for file system and controller overhead.
 3. (I) denotes Industrial Temperature option, leave blank for standard Commercial Temp.
- (v) Disk/Interface Options
 (w) UDMA/DMA option
 (x) NAND Die Revision
 (y) Component Flash IC Density
 (z) Firmware Revision/Options
 See Flash Naming Guide on Page 13 for further details

SD Industrial Flash Disks



Secure Digital Cards (Industrial Grade)

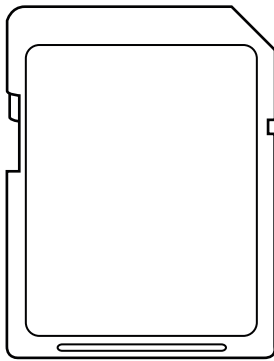
Wintec Industries' RoHS Compliant Secure Digital Cards constructed with single-level-cell (SLC) NAND flash memory devices paired to a powerful 32-bit RISC/DSP-based system controller allow virtual-to-physical address mapping and other flash management functions. Wintec Industries' Secure Digital Cards employ a variety of sophisticated error checking and flash management utilities allowing for maximum levels of data reliability and card endurance. Patented wear-leveling methods ensure even wear of flash blocks across the entire card capacity. Bad-block Management routines replace worn blocks with spare blocks reserved by the controller on card initialization. The low power consumption and wide voltage range of Wintec SD Cards benefit mobile, battery powered applications such as audio players, PDAs, electronic books, encyclopedias and dictionaries.

General

- Dual 3.3V / 1.8V Interface
- Industry Standard Compatibility (SD standard, rev 1.01 / 1.10 / 2.0)
- RoHS Compliant
- Low Power consumption

Reliability

- > 2,000,000 Program/Erase Cycles
- Industrial Wear Leveling
 - Includes Static Block Management
- Spares & Bad Block Management
- On-chip ECC and for flash data protection
- Hardware support for CPRM



Card Size	Part Numbering	Capacity (bytes)	Total Sectors/ Card (Max LBA+1)	Cylinders	Heads	Sectors
64MB	W7SD064MvXA(l)-Hw0Px-yyy.zz	65,536,000	128,000	1,000	4	32
128MB	W7SD128MvXA(l)-Hw0Px-yyy.zz	131,334,144	256,512	1,002	8	32
256MB	W7SD256MvXA(l)-Hw0Px-yyy.zz	262,930,432	513,536	1,003	16	32
512MB	W7SD512MvXA(l)-Hw0Px-yyy.zz	526,417,920	1,028,160	1,020	16	63
1GB	W7SD001GvXA(l)-Hw0Px-yyy.zz	1,054,900,224	2,060,352	2,044	16	63
2GB	W7SD002GvXA(l)-Hw0Px-yyy.zz	2,118,057,984	4,136,832	4,104	16	63
4GB	W7SD004GvXA(l)-Hw0Px-yyy.zz	4,244,889,600	8,290,800	8,225	16	63
8GB	W7SD008GvXA(l)-Hw0Px-yyy.zz	8,414,945,280	16,435,440	16,305	16	63

NOTE:

1. Total Sectors/Card = Sectors/Track * # Heads * # Cylinders
 2. Capacity = The logical address capacity including the area used for file system and controller overhead.
 3. (l) denotes Industrial Temperature option, leave blank for standard Commercial Temp.
- (v) Disk/Interface Options - Standard / SHDC
 (w) Controller version
 (x) NAND Die Revision
 (y) Component Flash IC Density
 (z) Firmware Revision/Options
 See Flash Naming Guide on Page 13 for further details



USB Flash Disks USB

USB Flash Drive

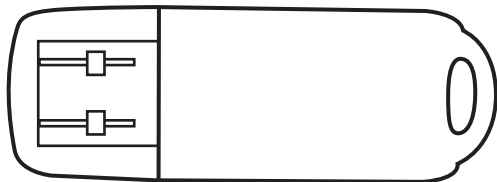
Wintec Industries' USB Flash drive is a fully USB v2.0 and v1.1 compliant flash storage device, featuring high speed performance and high reliability in a compact form factor. Wintec's USB Flash drives are compatible with Windows Vista, XP, 2000 and ME based systems along with MAC OS 9.0 or later, and Linux Kernel 2.4.2 or later, making them an ideal storage and data transfer solution. Wintec's USB Flash Drives are built with a locked BOM and locked firmware revision to ensure consistency and reliability.

General

- Fully Compatible with USB v2.0 & v1.1
- True Plug and Play Functionality
- Built in LED to indicate power and transfer status
- Small form factor
- Customization and configuration options available

Reliability

- 10 -Year Data Retention
- Up to 10,000 insertions
- SLC NAND
- 100,000 Program / Erase cycles per block

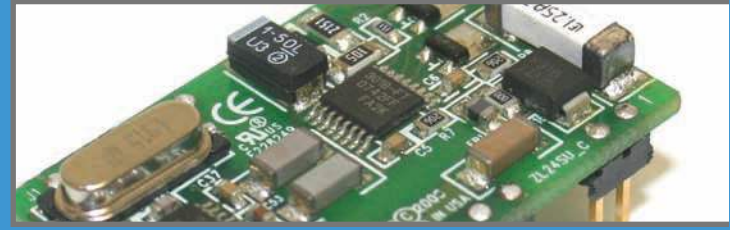


Card Size	Part Numbering	Capacity (bytes)
64MB	W7MU064M I wA-SM0Px-yyy.zz	65,536,000
128MB	W7MU128M I wA-SM0Px-yyy.zz	131,334,144
256MB	W7MU256M I wA-SM0Px-yyy.zz	262,930,432
512MB	W7MU512M I wA-SM0Px-yyy.zz	526,417,920
1GB	W7MU001G I wA-SM0Px-yyy.zz	1,054,900,224
2GB	W7MU002G I wA-SM0Px-yyy.zz	2,118,057,984
4GB	W7MU004G I wA-SM0Px-yyy.zz	4,244,889,600
8GB	W7MU008G I wA-SM0Px-yyy.zz	8,414,945,280

NOTE:

1. Total Sectors/Card = Sectors/Track * # Heads * # Cylinders
 2. Capacity = The logical address capacity including the area used for file system and controller overhead.
 3. (I) denotes Industrial Temperature option, leave blank for standard Commercial Temp.
- (w) UDMA/DMA option
 (x) NAND Die Revision
 (y) Component Flash IC Density
 (z) Firmware Revision/Options
 See Flash Naming Guide on Page 13 for further details

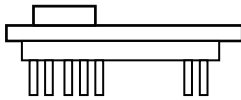
Modem Embedded Modules



Embedded Modem Modules

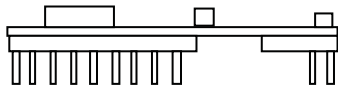
Wintec's original embedded modem is the SLM24xx family of 1.0-inch x 2.0-inch (25.4 mm x 50.8 mm) products. The small form factor modems meet the global telephone line standards and are FCC Part 15, FCC Part 68, CTR21, IC-CS03 compliant. The modems are UL certified and meet European Union Directives with CE marking and RoHS compliance. [New Paragraph] Wintec's newest embedded modem family supports a new form factor of 0.9 inch x 1.4 inch (22.86 mm x 35.56 mm), one of the smallest that meets the global telephone line standards with built-in safety devices. The Wintec SL modems employ Silicon Laboratory's newest generation of ISOModem chipset with up to V.92/V.44 protocol.

SL Embedded Modem Series



Part Number	Maximum Speed	Error Correction Support	Data Compression Support	Form Factor	FCC Certified
SL2404SU	2.4Kbps	V.21 / V.22bis	V.21 / V.22bis	1.4" x 0.9"	Yes
SL2415SU	14.4Kbps	V.42 / MNP2-4	V.42bis / MNP5	1.4" x 0.9"	Yes
SL2434SU	33.6Kbps	V.42 / MNP2-4	V.42bis / MNP5	1.4" x 0.9"	Yes
SL2457SU	56Kbps Download/ 33.6Kbps Upload	V.42 / MNP2-4	V.42bis / MNP5	1.4" x 0.9"	Yes
SL2493SU	56Kbps Download/ 48Kbps Upload	V.42 / MNP2-4	V.42bis / MNP5	1.4" x 0.9"	Yes

CM Embedded Modem Series



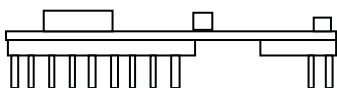
Part Number	Maximum Speed	Error Correction Support	Data Compression Support	Form Factor	FCC Certified
CM86533	33.6Kbps	V.42 / MNP2-4	V.44 / V.42bis/MNP5	2.0" x 1.0"	Yes
CM86592	56Kbps Download/ 33.6Kbps Upload	V.42 / MNP2-4	V.44 / V.42bis/MNP5	2.0" x 1.0"	Yes



Embedded Modules Modem

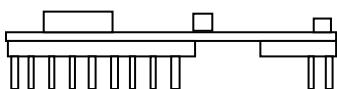
Embedded Modem Modules

SLM 3rd Generation Embedded Modem Series



Part Number	Maximum Speed	Error Correction Support	Data Compression Support	Form Factor	FCC Certified
SLM2404	2.4Kbps	V.21 / V.22bis	V.21 / V.22bis	2.0" x 1.0"	Yes
SLM2415	14.4Kbps	V.42 / MNP2-4	V.42bis / MNP5	2.0" x 1.0"	Yes
SLM2434	33.6Kbps	V.42 / MNP2-4	V.42bis / MNP5	2.0" x 1.0"	Yes
SLM2457	56Kbps Download/ 33.6Kbps Upload	V.42 / MNP2-4	V.42bis / MNP5	2.0" x 1.0"	Yes
SLM2493	56Kbps Download/ 48Kbps Upload	V.42 / MNP2-4	V.42bis / MNP5	2.0" x 1.0"	Yes

SLM 2nd Generation Embedded Modem Series (Revision H)



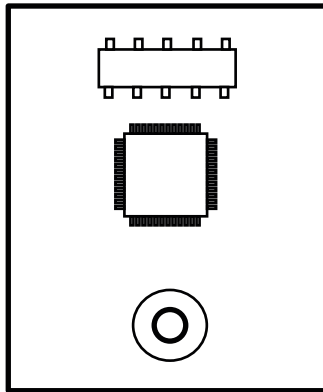
Part Number	Maximum Speed	Error Correction Support	Data Compression Support	Form Factor	FCC Certified
SLM2403-H	2.4Kbps	V.21 / V.22bis	V.21 / V.22bis	2.0" x 1.0"	Yes
SLM2414-H	14.4Kbps	V.42 / MNP2-4	V.42bis / MNP5	2.0" x 1.0"	Yes
SLM2433-H	33.6Kbps	V.42 / MNP2-4	V.42bis / MNP5	2.0" x 1.0"	Yes
SLM2456-H	56Kbps Download/ 33.6Kbps Upload	V.42 / MNP2-4	V.42bis / MNP5	2.0" x 1.0"	Yes

USB Embedded Modules



Embedded USB Device

The Wintec Embedded USB Flash Drive is a robust and reliable high performance storage and backup solution in a compact form factor. Fully USB 2.0 compatible with high data transfer rates. Superior reliability is achieved by using high quality SLC NAND and featuring extensive error correcting capabilities of 8 random bits per 512Byte sector. Available in capacities from 128MB to 8GB. Wintec's W7EU series embedded USB flash drives are ideal for embedded applications demanding high performance and reliability.

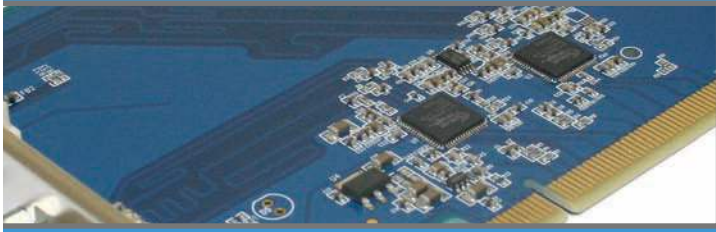


Density	SKU
128MB	W7EU128M1XC-SM0Px-yyy.zz
256MB	W7EU256M1XC-SM0Px-yyy.zz
512MB	W7EU512M1XC-SM0Px-yyy.zz
1GB	W7EU001G1XC-SM0Px-yyy.zz
2GB	W7EU002G1XC-SM0Px-yyy.zz
4GB	W7EU004G1XC-SM0Px-yyy.zz
8GB	W7EU008G1XC-SM0Px-yyy.zz

Note:

x = Current Die Rev
y = NAND configuration
z = Firmware / Revision

MLC and custom configurations also available. Please consult with your sales representative for additional information including latest firmware and die revisions.

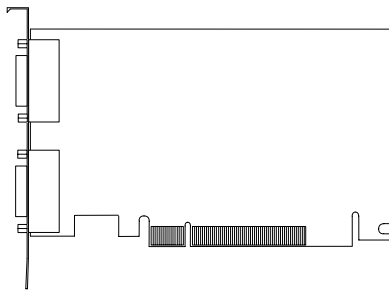


ADD2 Cards ADD2

ADD2 Card Series

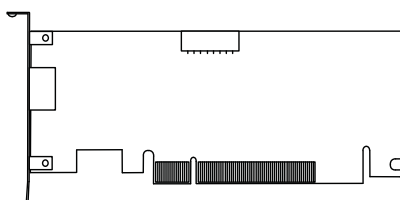
ADD2 cards are a convenient, low-cost method for connecting one or two DVI digital displays to the graphics controller of any Intel based motherboards. Less expensive than add-on graphics cards, the ADD2 card utilizes the PCI Express x16 port to accept Serial Digital Video Out (SDVO) signals from the graphics controller hub. The HDMI PCI-e Adapter Card provides HDMI output for PCs based on Intel chipset with a Graphic Media Accelerator 3000 or 3100 and onboard audio. Video and sound can be delivered from the computer directly to the display in a single cable.

DVI



Part Number	Form Factor	Video Output	Connector	Required Cable	FCC Certified
WAAD0010DVI-SLP	Low Profile	DVI	DVI-I 29 Pin	Std. DVI	Yes
WAAD0010DVI-ULP	Ultra Low Profile	DVI	Remote DVI-I 29 Pin	Std. DVI	Yes
WAAD0010DV2-S	Full Height / Short card	2 x DVI	DVI-I 29 Pin	2 x Std. DVI	Yes
WAAD0010DV2-S-DB	Full Height / Full Length Card	2 x DVI	2 x DVI-I 29 Pin	2 x Std. DVI	Yes
WAAD0010DV2-SLP	Low Profile	2 x DVI	DMS-59 Pin	DVI-Y cable	Yes
WAAD0010DV2-ULP	Ultra Low Profile	2 x DVI	2 x Remote DVI-I 29 Pin	2 x Std. DVI	Yes

HDMI



Part Number	Form Factor	Video Output	Connector	Required Cable	FCC Certified
WAAD0010HDM-SLP+	Low Profile	HDMI w/ HDCP	HDMI	Std. HDMI	Yes
WAAD0010HDM-S+	Full Height	HDMI w/ HDCP	HDMI	Std. HDMI	Yes

OEM Information

OEM Services

OEM Design Options

Wintec's OEM division offers our clients a complete array of design options. Beginning with the initial requirements, our engineers and developers can work with you throughout the design process. Our electronic and electrical design options can demonstrate the flexibility with which we operate and how we apply the most current and cutting edge technological advances to be customized to your exact need. With our manufacturing base located in Milpitas, CA, our manufacturing design capabilities offer our customers a significant advantage over our competitors. We specialize in both standard and customized manufacturing options and with our extensive experience in these areas, Wintec OEM can provide you with all the tools you require to develop, manufacture, and test your latest design. To complement these services, our packaging design abilities will enable Wintec to provide you with a start-to-finish solution. From initial PCB board layout to the final package for your product, the services and solutions that are available from Wintec Industries can provide you with more options than you ever envisaged possible.

Testing

A vital section of Wintec's services is our testing capabilities. We offer customized testing solutions for a variety of applications. As a leading memory module manufacturer of high-speed, high-capacity memory modules, we put a huge emphasis on our testing and quality control. Wintec Industries employs a policy of 100% motherboard testing for all of our registered memory modules. With our distinct and close relationship with the major motherboard manufacturers, Wintec can offer testing capabilities that are hard to equal. We utilize X-ray technologies, heat chambers, diagnostic machinery and extensive motherboard-testing program that will ensure that only the highest quality memory products leave our manufacturing plant.

Information OEM

OEM Services

Sustaining Services and Customization

Customized labeling, serialization and software and disk imaging are all services that Wintec has extensive experience with and can offer either as a complement to our standard products or as additional services for custom designs. Our customers need not be concerned with any software upgrades that occur after their initial design, as our content duplication facilities can guarantee that the most modern and up-to-date products are shipped. This will eliminate the need for costly updates and changes at the customer side as this can be incorporated into the solution that is provided by Wintec. With full FAE support offered for all products and services our experienced team can ensure that our customers receive the most complete solutions to meet all their needs.

OEM Information

OEM Services

Integration Services

The Integration Services Division's (ISD) mission is to enhance the operational efficiencies and capabilities of OEM system and system reseller customers. ISD provides creative and flexible integration services that adapt to our customer's unique operations.

Wintec's ISD branched out from the OEM memory division to provide system customers dedicated resources to address their specific business needs. ISD utilizes over 20 years of manufacturing experience and combines with the convenience of "off the shelf" system components from Wintec's Distribution division, to create a competitive edge for system customers. ISD has proven successful for customers seeking a partner capable of streamlining the supply chain, reducing finance and overhead costs, while providing increased value through a solid foundation of manufacturing and integration experience.

"Listen first and advise second" is the philosophy of our well-experienced team of production and quality engineers. We address each project individually. Moreover, as we seek opportunities to customize projects that fit intricately into the operations of each customer and work closely with partners, we are able to discover new efficiencies and see opportunities that allow us to design and tailor each product to meet specific needs.