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# DA-682 Series Component Compatibility Guide

A list of peripheral components suitable for use with DA-682 series computers

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### 1. Introduction

The hardware components listed in this document have either been proven to provide up-to-spec performance when used with the Moxa DA-682 series of embedded computers, or which share basic design features with such components.

As Moxa computers come with different peripheral options and are engineered to differing hardware specifications, compatibility issues may sometimes arise. When paired with Moxa's DA-682 series of embedded computers, peripherals from one manufacturer may not work as well as those made by another. For this reason, Moxa provides this list of compatible components, so that users can be certain to get the reliability they expect from Moxa's DA-682 series.

# 2. Testing Methods

To validate a component as meeting Moxa standards of quality and environmental tolerances, five key compatibility tests may be run:

- Ambient Temperature Burn-In
- Low Temperature Hard Starts
- Heat/Humidity Burn-In
- Cyclic High-Low Temperature Burn-in
- Vibration Test

### **Ambient Temperature Burn-in**

Components are mounted in an DA-682 computer and run through a series of stress tests at an ambient temperature of around 25°C for a specified period of time. Test periods are determined according to the class of peripherals being tested.

# **Low Temperature Hard Start**

Components are mounted in an unpowered DA-682 computer and then the system is booted up from an extremely low temperature. The designated temperature depends on the model being tested.

# Heat/Humidity Burn-in

Components are mounted in an DA-682 computer, placed in a temperature- and humidity-controlled enclosure, and then run through the burn-in test for a specific time. The temperature, humidity, and time targets vary depending on model specification.

# Cyclic High-Low Temperature Burn-in

Components are mounted in an DA-682 computer, placed in a temperature controlled enclosure, and then put through the burn-in test as temperatures are cycled from very high to very low and back again over a specified period of time. The target temperatures and time vary depending on model specifications.



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### **Vibration Test**

Components are mounted in an DA-682 computer, which is bound in an electromagnetic vibrator, and then run through random vibration tests about three axes: longitudinal, transverse, and vertical. The vibration tests are compliant with EN50155/IEC61373 vibration standards.

# 3. Compatible Components

Check the following table for the validation condition codes and their description.

Test Code	Description
Α	The component passed ambient temperature verification
В	The component passed low temperature verification
С	The component passed heat/humidity verification
D	The component passed cyclic high-low temperature verification
_	The component has not been tested, but shares materials and design with
E	another component that has been verified.
F	The component passed vibration verification

The following list shows which peripherals have been tested, and for what specifications, on Moxa's embedded computers.



DOM									
Vendor	Size	Moxa's PN	Vendor's PN	Flash Brand	Controller	Firmware	Test Codes		
InnoDisk	1 GB	N/A	DE4H-01GD31W1D-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	1 GB	N/A	DE4H-01GD31W1DR-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	2 GB	N/A	DE4H-02GD31W1D-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	2 GB	N/A	DE4H-02GD31W1DR-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	256 MB	N/A	DE4H-256D31W1S-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	256 MB	N/A	DE4H-256D31W1SR-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	4 GB	N/A	DE4H-04GD31W1D-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	4 GB	N/A	DE4H-04GD31W1DR-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	8 GB	N/A	DE4H-08GD31W1D-A31	Samsung	N/A	N/A	B, C, D		
InnoDisk	8 GB	N/A	DE4H-08GD31W1DT-A31	Micron	N/A	N/A	B, C, D		
Memoright	1 GB	N/A	MRDEM2B001GB7P1IA0	Samsung	N/A	N/A	B, C, D		
Memoright	16 GB	1352020162020	MRDEM2B016GN4P1IA0	Micron	N/A	N/A	B, C, D		
Memoright	2 GB	1352020022070	MRDEM2B002GB8P1IA0	Samsung	N/A	N/A	B, C, D		
Memoright	4 GB	1352020042060	MRDEM2B004GB0P1IA0	Samsung	N/A	N/A	B, C, D		
Memoright	8 GB	1352020082040	MRDEM2B008GN2P1IA0	Micron	N/A	N/A	B, C, D		
Silicon Power	8 GB	N/A	SP008GBIFM44FOV10-MA	Samsung	N/A	N/A	B, C, D		
Transcend	1 GB	N/A	TS1GDOM44V-S	N/A	N/A	N/A	B, C, D		
Transcend	256 MB	N/A	TS256MDOM44V-S	N/A	N/A	N/A	B, C, D		



CF								
Vendor	Size	Moxa's PN	Vendor's PN	Flash Brand	Controller	Firmware	Test Codes	
Transcend	128 MB	N/A	TS128MCF200I	Samsung	SM2232AD	N/A	E	
Transcend	256 MB	N/A	TS256MCF200I	Samsung	SM2232AD	N/A	E	
Transcend	512 MB	N/A	TS512MCF200I	Samsung	SM2232AD	N/A	E	
Transcend	1 GB	N/A	TS1GCF133	SanDisk/ Micron	SM2232AD	N/A	E	
Transcend	1 GB	N/A	TS1GCF200I	Samsung	SM2232AD	N/A	E	
Transcend	2 GB	N/A	TS2GCF133	SanDisk/ Micron	SM2232AD	N/A	E	
Transcend	2 GB	N/A	TS2GCF200I	Samsung	SM2232AD	N/A	E	
Transcend	4 GB	N/A	TS4GCF133	SanDisk/ Micron	SM2232AD	N/A	E	
Transcend	4 GB	N/A	TS4GCF200I	Samsung	SM2232AD	N/A	А	
Transcend	8 GB	N/A	TS8GCF400	SanDisk/ Micron	SM2236AC	N/A	E	
Transcend	8 GB	N/A	TS8GCF133	SanDisk/ Micron	SM2232AD	N/A	E	
Transcend	8 GB	N/A	TS8GCF200I	Samsung	SM2232AD	N/A	Е	
Transcend	16 GB	N/A	TS16GCF1000	SanDisk/ Micron	SM2232ENAC	N/A	E	
Transcend	16 GB	N/A	TS16GCF400	SanDisk/ Micron	SM2236AC	N/A	E	
Transcend	16 GB	N/A	TS16GCF133	SanDisk/ Micron	SM2232AD	N/A	E	
Transcend	16 GB	N/A	TS16GCF200I	Samsung	SM2232AD	N/A	E	
Transcend	32 GB	N/A	TS32GCF1000	SanDisk/ Micron	SM2236AC	N/A	А	
Transcend	32 GB	N/A	TS32GCF400	SanDisk/ Micron	SM2236AC	N/A	А	
Transcend	32 GB	N/A	TS32GCF133	SanDisk/ Micron	SM2232AD	N/A	E	
Transcend	32 GB	N/A	TS32GCF200I	Samsung	SM2232AD	N/A	А	
Apacer	32GB	N/A	AP-CF032GL9FS-NR	N/A	N/A	N/A	А	
Apacer	16GB	N/A	AP-CF016GL9FS-NR	N/A	N/A	N/A	E	
Apacer	8GB	N/A	AP-CF008GL9FS-NR	N/A	N/A	N/A	Е	
Apacer	4GB	N/A	AP-CF004GL9FS-NR	N/A	N/A	N/A	Е	
Apacer	32GB	N/A	AP-CF032GLAFS-NR	N/A	N/A	N/A	A	
Apacer	16GB	N/A	AP-CF016GLAFS-NR	N/A	N/A	N/A	E	
Apacer	8GB	N/A	AP-CF008GLAFS-NR	N/A	N/A	N/A	E	



SSD								
Vendor	Size	Moxa's PN	Vendor's PN	Chip Brand	Chip Spec	Controller	Firmware	Test Codes
Memoright	64 GB	1352030642132	MRSAJ6Q064GN225I00	Samsung	SLC	JMF612	MRV1.1.6	B, C, D
Transcend	16 GB	N/A	TS16GSSD500	Samsung	SLC	JM616	120820	E
Transcend	32 GB	N/A	TS32GSSD500	Samsung	SLC	JM616	120820	E
Transcend	64 GB	N/A	TS64GSSD320	SanDisk/ Micron	MLC	SF2281	N/A	E
Transcend	64 GB	N/A	TS64GSSD500	Samsung	SLC	JM616	120820	А
Transcend	128 GB	N/A	TS128GSSD320	SanDisk/ Micron	MLC	SF2281	N/A	E
Transcend	256 GB	N/A	TS256GSSD320	SanDisk/ Micron	MLC	SF2281	N/A	А
Apacer	64GB	N/A	AP64GAS510SB	N/A	MLC	N/A	N/A	А



DRAM							
Vendor Size Moxa's PN		Moxa's PN	Vendor's PN	Chip Brand	Speed	Test	
						Codes	
DSL	1 GB	1352110012040	D2SH28081XH30AB	Hynix	667	B, C, D	
DSL	512 MB	1352115121020	D2SS64161XH30AB	Samsung	667	B, C, D	
InnoDisk	1 GB	N/A	M2SJ-1GPF5W05-BA31	ProMOS	667	B, C, D	
InnoDisk	2 GB	N/A	M2SJ-2GPF2W05-B	ProMOS	667	B, C, D	
Unigen	1 GB	N/A	UG12T6400M8SU-6AS	Hynix	667	B, C, D	
Unigen	256 MB	N/A	UG32T6400L6SU6ATA	UG32T6400L6SU6ATA Hynix		B, C, D	
Unigen	512 MB	N/A	UG64T6400L8SU-6AS Hynix		667	B, C, D	
Transcend	1 GB	N/A	TS128MSQ64V8U	Samsung	800	E	
Transcend	2 GB	N/A	TS256MSQ64V8U	Samsung	800	А	



HDD								
Vendor	Size	Moxa's PN	Vendor's PN	Controller	Firmware	Test Codes		
HGST	1TB	N/A	HCC541010A9E680	N/A	N/A	А		
HGST	1TB	N/A	HTS541010A9E680	N/A	N/A	А		
WD	750GB	N/A	WD7500BPKT	N/A	N/A	А		
WD	1TB	N/A	WD10JUCT	N/A	N/A	А		
WD	1TB	N/A	WD10JPVT	N/A	N/A	А		
WD	1TB	N/A	WD10SPCX	N/A	N/A	А		
Samsung	2TB	N/A	ST2000LM003	N/A	N/A	А		
HGST	1 TB	N/A	HTS721010A9E630 / 0J22423	N/A	N/A	А		
HGST	500 GB	N/A	HTS725050A7E630 / 0J38075	N/A	N/A	А		