

# Memory Components & Cards Catalog

November 2024

REV 11152024

Visit [www.smartsemi.com](http://www.smartsemi.com) for complete device information,

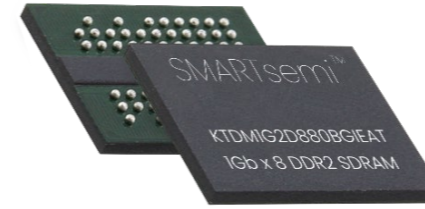
# OPERATING RANGES & TESTING

PRODUCT FAMILY	PRODUCT LINE*	OPERATING TEMPERATURE RANGE						TESTING	
		COMMERICAL		INDUSTRIAL		WIDE (AUTOMOTIVE)		AUTOMOTIVE (AEC-Q100 GRADE 2)	
DRAM Components	<a href="#">DDR2 SDRAM</a>	●	0°C to +95°C	●	-40°C to +95°C	●	-40°C to +105°C		
	<a href="#">DDR3(L) SDRAM</a>	●	0°C to +85°C	●	-40°C to +85°C	●	-40°C to +105°C	●	-40°C to +105°C
	<a href="#">DDR4 SDRAM</a>	●	0°C to +85°C	●	-40°C to +85°C				
FLASH Storage	<a href="#">eMMC 5.0</a>					●	-40°C to +105°C		
	<a href="#">eMMC 5.1</a>	●	-25°C to +85°C	●	-40°C to +85°C				
FLASH Cards	<a href="#">SD Cards</a>			●	-40°C to +85°C				
	<a href="#">microSD Cards</a>			●	-40°C to +85°C				

\* Check Product Line page online or in this catalog for specific devices in each family that comply with temperature ranges and testing.

# DDR2 SDRAM

Wide, Industrial, & Commercial Temperature Range



SMARTSEMI PART NUMBER	TEMP RANGE	TESTING	DENSITY	ORGANIZATION	CLOCK	DATA RATE	VOLTAGE	PACKAGE	PACKING	MOQ	INCREMENT	DATA SHEET	REL. REPORT
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
<a href="#">KTDM1G2D680BGCEAT</a>	0°C to +95°C	Commercial	1Gb	64Mbx16	400MHz	800Mbps	1.8V	84-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G2D680BGIEAT</a>	-40°C to +95°C	Industrial	1Gb	64Mbx16	400MHz	800Mbps	1.8V	84-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G2D680BGAEAT</a>	-40°C to +105°C	Wide	1Gb	64Mbx16	400MHz	800Mbps	1.8V	84-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G2D880BGCEAT</a>	0°C to +95°C	Commercial	1Gb	1Gbx8	400MHz	800Mbps	1.8V	60-ball FBGA	Tray	209	209	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G2D880BGIEAT</a>	-40°C to +95°C	Industrial	1Gb	1Gbx8	400MHz	800Mbps	1.8V	60-ball FBGA	Tray	209	209	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G2D880BGAEAT</a>	-40°C to +105°C	Wide	1Gb	1Gbx8	400MHz	800Mbps	1.8V	60-ball FBGA	Tray	209	209	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM522D680BGCEAT</a>	0°C to +95°C	Commercial	512Mb	32Mbx16	400MHz	800Mbps	1.8V	84-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM522D680BGIEAT</a>	-40°C to +95°C	Industrial	512Mb	32Mbx16	400MHz	800Mbps	1.8V	84-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM522D680BGAEAT</a>	-40°C to +105°C	Wide	512Mb	32Mbx16	400MHz	800Mbps	1.8V	84-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>

# DDR3(L) SDRAM

Wide/Auto, Industrial, & Commercial Temperature Range  
AEC-Q100 Grade 2 Automotive Tested



Product Catalog  
November 2024

SMARTSEMI PART NUMBER	TEMP RANGE	TESTING	DENSITY	ORGANIZATION	CLOCK	DATA RATE	VOLTAGE	PACKAGE	PACKING	MOQ	INCREMENT	DATA SHEET	REL. REPORT
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
<a href="#">KTDM1G3C618BGCEAT</a>	0°C to +85°C	Commercial	1Gb	64Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G3C618BGIEAT</a>	-40°C to +85°C	Industrial	1Gb	64Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G3C618BGCEAT</a>	0°C to +85°C	Commercial	1Gb	128Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM1G3C618BGIEAT</a>	-40°C to +85°C	Industrial	1Gb	128Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM2G3C618BGCEAT</a>	0°C to +85°C	Commercial	2Gb	128Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM2G3C618BGIEAT</a>	-40°C to +85°C	Industrial	2Gb	128Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM2G3C618BGAEAT</a>	-40°C to +105°C	Automotive <b>AEC-Q100 Grade 2</b>	2Gb	128Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM2G3C818BGCEAT</a>	0°C to +85°C	Commercial	2Gb	256Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM2G3C818BGIEAT</a>	-40°C to +85°C	Industrial	2Gb	256Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM2G3C818BGAEAT</a>	-40°C to +105°C	Automotive <b>AEC-Q100 Grade 2</b>	2Gb	256Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G3C618BGCEAT</a>	0°C to +85°C	Commercial	4Gb	256Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G3C618BGIEAT</a>	-40°C to +85°C	Industrial	4Gb	256Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G3C618BGAEAT</a>	-40°C to +85°C	Automotive <b>AEC-Q100 Grade 2</b>	4Gb	256Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G3C818BGCEAT</a>	0°C to +85°C	Commercial	4Gb	512Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G3C818BGIEAT</a>	-40°C to +85°C	Industrial	4Gb	512Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G3C818BGAEAT</a>	-40°C to +85°C	Automotive <b>AEC-Q100 Grade 2</b>	4Gb	512Mbx8	933MHz	1866Mbps	1.35V/1.5V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM8G3C618BGCEAT</a>	0°C to +85°C	Commercial	8Gb	512Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	Link
<a href="#">KTDM8G3C618BGIEAT</a>	-40°C to +85°C	Industrial	8Gb	512Mbx16	933MHz	1866Mbps	1.35V/1.5V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	Link

# DDR4 SDRAM

Industrial & Commercial Temperature Range



SMARTSEMI PART NUMBER	TEMP RANGE	TESTING	DENSITY	ORGANIZATION	CLOCK	DATA RATE	VOLTAGE	PACKAGE	PACKING	MOQ	INCREMENT	DATA SHEET	REL. REPORT
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
<a href="#">KTDM4G4B626BGCEAT</a>	0°C to +85°C	Commercial	4Gb	256Mbx16	1333MHz	2666Mbps	1.2V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G4B626BGIEAT</a>	-40°C to +85°C	Industrial	4Gb	256Mbx16	1333MHz	2666Mbps	1.2V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G4B826BGCEAT</a>	0°C to +85°C	Commercial	4Gb	512Mbx8	1333MHz	2666Mbps	1.2V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTDM4G4B826BGIEAT</a>	-40°C to +85°C	Industrial	4Gb	512Mbx8	1333MHz	2666Mbps	1.2V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	<a href="#">Link</a>

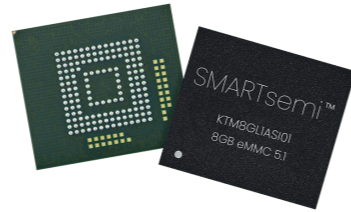
Retired Components. Contact [SMARTsemi SOURCEplus](#) for EOL Support or Alternative Solutions

[Goto SOURCEplus](#)

<a href="#">KTDM8G4B632BGCBCT</a>	0°C to +85°C	Commercial	8Gb	512Mbx16	1600Mhz	3200Mbps	1.2V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	Link
<a href="#">KTDM8G4B632BGIBCT</a>	-40°C to +85°C	Industrial	8Gb	512Mbx16	1600MHz	3200Mbps	1.2V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	Link
<a href="#">KTDM8G4B832BGCBCT</a>	0°C to +85°C	Commercial	8Gb	1Gbx8	1333MHz	3200Mbps	1.2V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	Link
<a href="#">KTDM8G4B832BGIBCT</a>	-40°C to +85°C	Industrial	8Gb	1Gbx8	1333MHz	3200Mbps	1.2V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	Link
<a href="#">KTDMAG4B632BGCBAT</a>	0°C to +85°C	Commercial	16Gb	1Gbx16	1600MHz	3200Mbps	1.2V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	Link
<a href="#">KTDMAG4B632BGIBAT</a>	-40°C to +85°C	Industrial	16Gb	1Gbx16	1600MHz	3200Mbps	1.2V	96-ball FBGA	Tray	198	198	<a href="#">Link</a>	Link
<a href="#">KTDMAG4B832BGCBAT</a>	0°C to +85°C	Commercial	16Gb	2Gbx8	1600MHz	3200Mbps	1.2V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	Link
<a href="#">KTDMAG4B832BGIBAT</a>	-40°C to +85°C	Industrial	16Gb	2Gbx8	1600MHz	3200Mbps	1.2V	78-ball FBGA	Tray	210	210	<a href="#">Link</a>	Link

# FLASH EMMC 5.0

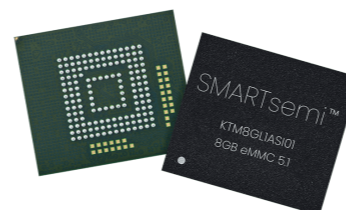
Wide Temperature Range



SMARTSEMI PART NUMBER	TEMP RANGE	TESTING	CAPACITY	PROG. BUS WIDTH	FLASH TYPE	SEQ. READ	SEQ. WRITE	RNDM. READ	RNDM. WRITE	VOLTAGE (NAND/IO)	PACKAGE	PACKING	MOQ	INCR.	DATA SHEET	REL. REPORT
<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>
<a href="#">KTMBGP1CWW01</a>	-40°C to +105°C	Wide	8GB	x1	MLC NAND	260MB/s	85MB/s	5800 IOPS	2100 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTMBGP1CWW01</a>	-40°C to +105°C	Wide	16GB	x2	MLC NAND	260MB/s	130MB/s	6000 IOPS	2200 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTMBGP1CWW01</a>	-40°C to +105°C	Wide	32GB	x4	MLC NAND	260MB/s	130MB/s	6000 IOPS	2200 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	<a href="#">Link</a>

# FLASH EMMC 5.1

Industrial & Commercial Temperature Range



SMARTSEMI PART NUMBER	TEMP RANGE	TESTING	CAPACITY	PROG. BUS WIDTH	FLASH TYPE	SEQ. READ	SEQ. WRITE	RNDM. READ	RNDM. WRITE	VOLTAGE (NAND/IO)	PACKAGE	PACKING	MOQ	INCR.	DATA SHEET	REL. REPORT
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
<a href="#">KTM4GH1AHI01</a>	-40°C to +85°C	Industrial	4GB	x1/x4/x8	MLC NAND	170MB/s	15MB/s	5345 IOPS	980 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTM4GH1AHI01-TR</a>	-40°C to +85°C	Industrial	4GB	x1/x4/x8	MLC NAND	170MB/s	15MB/s	5345 IOPS	980 IOPS	3.3V/1.8V	153-FBGA	Tape&Reel	152	152	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTM8GH2AHI01</a>	-40°C to +85°C	Industrial	8GB	x1/x4/x8	MLC NAND	250MB/s	65MB/s	10000 IOPS	2000 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTM8GH2AHI01-TR</a>	-40°C to +85°C	Industrial	8GB	x1/x4/x8	MLC NAND	250MB/s	65MB/s	10000 IOPS	2000 IOPS	3.3V/1.8V	153-FBGA	Tape&Reel	152	152	<a href="#">Link</a>	Link
<a href="#">KTMAGY1ASE01</a>	-25°C to +85°C	Commercial	16GB	x1/x4/x8	TLC NAND	320MB/s	145MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMAGY1ASI01</a>	-40°C to +85°C	Industrial	16GB	x1/x4/x8	TLC NAND	320MB/s	145MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMAGP3BMI01</a>	-40°C to +85°C	Industrial	16GB	x1/x4/x8	TLC NAND	320MB/s	135MB/s	21000 IOPS	20000 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMBGY1ASE01</a>	-25°C to +85°C	Commercial	32GB	x1/x4/x8	TLC NAND	320MB/s	145MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMBGY1ASI01</a>	-40°C to +85°C	Industrial	32GB	x1/x4/x8	TLC NAND	320MB/s	145MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMCGY1ASE01</a>	-25°C to +85°C	Commercial	64GB	x1/x4/x8	TLC NAND	320MB/s	145MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMCGY1ASI01</a>	-40°C to +85°C	Industrial	64GB	x1/x4/x8	TLC NAND	320MB/s	145MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMDGY1ASE01</a>	-25°C to +85°C	Commercial	128GB	x1/x4/x8	TLC NAND	320MB/s	170MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMDGY1ASI01</a>	-40°C to +85°C	Industrial	128GB	x1/x4/x8	TLC NAND	320MB/s	170MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMDGP3CTI01</a>	-40°C to +85°C	Industrial	128GB	x1/x4/x8	TLC NAND	330MB/s	190MB/s	16,000 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	<a href="#">Link</a>

Retired Components. Contact [SMARTsemi SOURCEplus](#) for EOL Support or Alternative Solution: [Goto SOURCEplus](#)

<a href="#">KTM8GL1ASI01</a>	-40°C to +85°C	Industrial	8GB	x1/x4/x8	MLC NAND	240MB/s	110MB/s	3100 IOPS	4100 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTM8GY1ASI01</a>	-40°C to +85°C	Industrial	8GB	x1/x4/x8	TLC NAND	320MB/s	145MB/s	3700 IOPS	6500 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link
<a href="#">KTMAGL1ASI01</a>	-40°C to +85°C	Industrial	16GB	x1/x4/x8	MLC NAND	240MB/s	110MB/s	3100 IOPS	4100 IOPS	3.3V/1.8V	153-FBGA	Tray	152	152	<a href="#">Link</a>	Link

# FLASH SD™ Card 3.01/SDR104

Industrial Temperature Range



SMARTSEMI PART NUMBER	TEMP RANGE	TYPE	CAPACITY	FLASH TYPE	UHS CLASS	SPEED CLASS	VIDEO CLASS	ENDURANCE	SEQ. READ	SEQ. WRITE	PACKAGE	PACKING	MOQ	INCR.	DATA SHEET	REL. REPORT
<a href="#">KTSDDGP2AKIT1</a>	-40°C to +85°C	SDXC	128GB	TLC NAND	U3	C10	V60	366 TBW	100MB/s	85MB/s	32x24x2.1mm	Tray	400	400	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTSDCGP2AKIT1</a>	-40°C to +85°C	SDXC	64GB	TLC NAND	U3	C10	V30	183 TBW	100MB/s	50MB/s	32x24x2.1mm	Tray	400	400	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTSDBGP1AMIT1</a>	-40°C to +85°C	SDHC	32GB	TLC NAND	U1	C10	V10	91 TBW	100MB/s	15MB/s	32x24x2.1mm	Tray	400	400	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTSDAGP2AKIU1</a>	-40°C to +85°C	SDHC	16GB	pSLC NAND	U3	C10	V60	460 TBW	100MB/s	85MB/s	32x24x2.1mm	Tray	400	400	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTSD8GP3ASIM1</a>	-40°C to +85°C	SDHC	8GB	MLC NAND	U3	C10	V30	23 TBW	95MB/s	35MB/s	32x24x2.1mm	Tray	400	400	<a href="#">Link</a>	<a href="#">Link</a>

### Performance Classification

Minimum Sequential Write Speed	Suggested Maximum Bit Rate	Speed Class			Video Format			
		Speed Class	UHS Class	Video Class	SD	HD/FHD	4K	8K
2 MB/s	15 Mbit/s	Class 2						
4 MB/s	30 Mbit/s	Class 4						
6 MB/s	45 Mbit/s	Class 6		Class 6				
10 MB/s	75 Mbit/s	Class 10	Class 1	Class 10				
30 MB/s	220 Mbit/s	Class 10	Class 3	Class 30				
60 MB/s	460 Mbit/s	Class 10	Class 3	Class 60				
90 MB/s	700 Mbit/s	Class 10	Class 3	Class 90				

### Physical Attributes

Capacity			
SD	SDHC	SDXC	SDUC
Up to 2GB	>2GB to 32GB	>32GB to 2TB	>2TB to 128TB

Form Factor	
SD	microSD
32x24x2.1mm	11x15x1xmm



# FLASH microSD™ Cards 6.1

Industrial Temperature Range



SMARTSEMI PART NUMBER	TEMP RANGE	TYPE	CAPACITY	FLASH TYPE	UHS CLASS	SPEED CLASS	VIDEO CLASS	APPLICATION PERFORMANCE	SEQ. READ	SEQ. WRITE	PACKAGE	PACKING	MOQ	INCR.	DATA SHEET	REL. REPORT
<a href="#">KTUDEGA1AWIT1</a>	-40°C to +85°C	microSDXC	256GB	TLC NAND	U3	C10	V60	A2	97MB/s	83MB/s	11x15x1mm	Tray	120	120	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTUDCGP2AKIT1</a>	-40°C to +85°C	microSDXC	64GB	TLC NAND	U3	C10	V30		95MB/s	50MB/s	11x15x1mm	Tray	120	120	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTSDBGP1AMIT1</a>	-40°C to +85°C	microSDHC	32GB	TLC NAND	U1	C10	V10		100MB/s	15MB/s	11x15x1mm	Tray	120	120	<a href="#">Link</a>	<a href="#">Link</a>
<a href="#">KTUDAGP2AKIU1</a>	-40°C to +85°C	microSDHC	16GB	pSLC NAND	U3	C10	V60		100MB/s	85MB/s	11x15x1mm	Tray	120	120	<a href="#">Link</a>	<a href="#">Link</a>

### Performance Classification

Minimum Sequential Write Speed	Suggested Maximum Bit Rate	Speed Class			Video Format			
		Speed Class	UHS Class	Video Class	SD	HD/FHD	4K	8K
2 MB/s	15 Mbit/s	Class 2 @						
4 MB/s	30 Mbit/s	Class 4 @						
6 MB/s	45 Mbit/s	Class 6 @		Class 6 V6				
10 MB/s	75 Mbit/s	Class 10 @	Class 1 U1	Class 10 V10				
30 MB/s	220 Mbit/s	Class 10 @	Class 3 U3	Class 30 V30				
60 MB/s	460 Mbit/s	Class 10 @	Class 3 U3	Class 60 V60				
90 MB/s	700 Mbit/s	Class 10 @	Class 3 U3	Class 90 V90				

### Physical Attributes

Capacity			
SD	SDHC	SDX	SDUC
Up to 2GB	>2GB to 32GB	>32GB to 2TB	>2TB to 128TB

Form Factor	
SD	microSD
32x24x2.1mm	11x15x1mm