

SERRA, 27 DE JUNHO DE 2022

AO SERVIÇO NACIONAL DE APRENDIZAGEM COMERCIAL - SENAC

CONCORRÊNCIA: 13560/2022

ABERTURA: 27/06/2022 ÀS 10H00MIN.

PROPOSTA DE PREÇO

PREZADOS SENHORES:

TENDO EXAMINADO MINUCIOSAMENTE AS NORMAS ESPECÍFICAS DO PROCESSO LICITATÓRIO ACIMA TENDO COMO OBJETO A AQUISIÇÃO DE COMPONENTES DE INFORMÁTICA E APÓS TERMOS TOMADO CONHECIMENTO DE TODAS AS CONDIÇÕES LÁ ESTABELECIDAS, PASSAMOS A FORMULAR A SEGUINTE PROPOSTA:

1. PROPOSMOS FORNECER, SOB NOSSA INTEGRAL RESPONSABILIDADE, OS EQUIPAMENTOS, OBJETO DO REFERIDO CERTAME, CONFORME A TABELA ABAIXO:

ITEM	ESPECIFICAÇÃO	QTD	MARCA	VALOR UNITÁRIO	VALOR TOTAL
1	SSD 240GB – SATA 3 MODELO: SKC600/256G + CABO SATA 3 6GB/S	473	KINGSTON	R\$ 352,00 (TREZENTOS E CINQUENTA E DOIS REAIS)	R\$ 166.496,00 (CENTO E SESENTA E SEIS MIL, QUATROCENTOS E NOVENTA E SEIS REAIS)
2	SSD 480GB – SATA 3 MODELO: SKC600/512G + CABO SATA 3 6GB/S	5802	KINGSTON	R\$ 634,00 (SEISCENTOS E TRINTA E QUATRO REAIS)	R\$ 3.678.468,00 (TRÊS MILHÕES, SEISCENTOS E SETENTA E OITO MIL, QUATROCENTOS E SESENTA E OITO REAIS)
3	SSD 960GB – SATA 3 MODELO: SKC600/1024G + CABO SATA 3 6GB/S	401	KINGSTON	R\$ 1.133,00 (HUM MIL, CENTO E TRINTA E TRÊS REAIS)	R\$ 454.333,00 (QUATROCENTOS E CINQUENTA E QUATRO MIL, TREZENTOS E TRINTA E TRÊS REAIS)
4	SSD 250GB – M2 2280 MODELO: SNVS/250G NAND 3D TLC	35	KINGSTON	R\$ 265,00 (DUZENTOS E SESENTA E CINCO REAIS)	R\$ 9.275,00 (NOVE MIL, DUZENTOS E SETENTA E CINCO REAIS)
5	SSD 500GB – M2 2280 MODELO: SNVS/500G NAND 3D TLC	180	KINGSTON	R\$ 377,00 (TREZENTOS E SETENTA E SETE REAIS)	R\$ 67.860,00 (SESENTA E SETE MIL, OITOCENTOS E SESENTA REAIS)
6	SSD 1000GB – M2 2280 MODELO: SNVS/1000G NAND 3D TLC	172	KINGSTON	R\$ 734,00 (SETECENTOS E	R\$ 126.248,00 (CENTO E VINTE E SEIS MIL,



				TRINTA E QUATRO REAIS)	DUZENTOS E QUARENTA E OITO REAIS)
7	PLACA DE VÍDEO GTX1650 4GB GDDR5	574	-	-	-
8	MEMÓRIA 8GB DDR3 – 1600MHZ – DIMM MODELO: KVR16N11/8WP	2839	KINGSTON	R\$ 372,50 (TREZENTOS E SETENTA E DOIS REAIS E CINQUENTA CENTAVOS)	R\$ 1.057.527,50 (HUM MILHÃO, CINQUENTA E SETE MIL, QUINHENTOS E VINTE E SETE REAIS E CINQUENTA CENTAVOS)
9	MEMÓRIA 8GB DDR3L SDRAM – 1600MHZ – SODIMM MODELO: KVR16LS11/8WP	605	KINGSTON	R\$ 372,50 (TREZENTOS E SETENTA E DOIS REAIS E CINQUENTA CENTAVOS)	R\$ 225.362,50 (DUZENTOS E VINTE E CINCO MIL, TREZENTOS E SESSENTA E DOIS REAIS E CINQUENTA CENTAVOS)
10	MEMÓRIA 8GB DDR4 SDRAM – 2666MHZ – SODIMM MODELO: KVR26S19S8/8	719	KINGSTON	R\$ 264,00 (DUZENTOS E SESSENTA E QUATRO REAIS)	R\$ 189.816,00 (CENTO E OITENTA E NOVE MIL, OITOCENTOS E DEZESSEIS REAIS)
11	MEMÓRIA 16GB DDR4 – 2133MHZ UDIMM MODELO: KVR26N19D8/16	272	KINGSTON	R\$ 503,00 (QUINHENTOS E TRÊS REAIS)	R\$ 136.816,00 (CENTO E TRINTA E SEIS MIL, OITOCENTOS E DEZESSEIS REAIS)
12	MEMÓRIA 8GB DDR4 – 2133MHZ UDIMM MODELO: KVR26N19S8/8	1354	KINGSTON	R\$ 264,00 (DUZENTOS E SESSENTA E QUATRO REAIS)	R\$ 357.456,00 (TREZENTOS E CINQUENTA E SETE MIL, QUATROCENTOS E CINQUENTA E SEIS REAIS)
13	MEMÓRIA 16GB DDR4 SDRAM – 2666MHZ – SODIMM MODELO: KVR26S19D8/16	43	KINGSTON	R\$ 503,00 (QUINHENTOS E TRÊS REAIS)	R\$ 21.629,00 (VINTE E UM MIL, SEISCENTOS E VINTE E NOVE REAIS)
				TOTAL DA PROPOSTA	R\$ 6.491.287,00 (SEIS MILHÕES, QUATROCENTOS E NOVENTA E UM MIL, DUZENTOS E OITENTA E SETE REAIS)

- O VALOR TOTAL DA PROPOSTA É R\$ 6.491.287,00 (SEIS MILHÕES, QUATROCENTOS E NOVENTA E UM MIL, DUZENTOS E OITENTA E SETE REAIS)**
- NOS PREÇOS INDICADOS ACIMA ESTÃO INCLuíDOS, ALÉM DO FORNECIMENTO DO PRODUTO, TODOS OS DEMAIS CUSTOS COM MÃO DE OBRA, SALÁRIOS, BENEFÍCIOS, ENCARGOS DIRETOS E INDIRETOS, TRIBUTOS (QUANDO APLICÁVEL) E SEUS REFLEXOS DE SUBSTITUIÇÃO TRIBUTÁRIA INCLuíDAS NO REGIME POR CONTA DE PROTOCOLOS E CONVÊNIOS ICMS, ALÉM DE FRETE, GARANTIA E DEMAIS CONTRIBUIÇÕES PERTINENTES. O PREÇO INDICADO JÁ CONTEMPLA QUAISQUER DESCONTOS DO VALOR APURADO, INCLUSIVE PARA ICMS/DIFAL NOS ESTADOS BENEFICIADOS COM ESTA DISPENSA. DECLARAMOS QUE CONHECEMOS A LEGISLAÇÃO DE REGÊNCIA DESTA LICITAÇÃO E QUE OS SERVIÇOS SERÃO PRESTADOS DE ACORDO COM AS CONDIÇÕES ESTABELECIDAS NESTE EDITAL, O QUE CONHECEMOS E ACEITAMOS EM TODOS OS SEUS TERMOS, INCLUSIVE QUANTO AO PAGAMENTO E OUTROS.
- DECLARAMOS, TAMBÉM, QUE NENHUM DIREITO A INDENIZAÇÃO OU REEMBOLSO DE QUAISQUER DESPESAS NOS SERÁ DEVIDO, CASO A NOSSA PROPOSTA NÃO SEJA ACEITA PELO **SERVIÇO NACIONAL DE APRENDIZAGEM COMERCIAL - SENAC** SEJA QUAL FOR O MOTIVO.



5. A PRESENTE PROPOSTA É VALIDA POR **90 (NOVENTA) DIAS**, A CONTAR DA DATA ESTABELECIDA PARA A SUA ABERTURA.
6. OS PAGAMENTOS SERÃO REALIZADOS ATÉ **30 (TRINTA) DIAS** APÓS A EMISSÃO DO TERMO DE RECEBIMENTO DEFINITIVO E DEVERÃO CREDITADOS NA **CONTA CORRENTE Nº 7105-6, AGÊNCIA Nº 2414-7 NO BANCO DO BRASIL S/A, CÓDIGO 001.**
7. O PROCURADO DA EMPRESA, CUJO CNPJ É **03.619.767/0005-15**, QUE ASSINARÁ A ATA DE REGISTRO DE PREÇO OU CONTRATO, É O **SR. RODRIGO DO AMARAL RISSIO** PORTADOR DO **CPF 220.807.218-95** E **RG 27.954.969-6 SSP/SP;**
8. GARANTIA: **36 (TRINTA E SEIS) MESES** ONSITE CONFORME EDITAL;
9. VALORES EXPRESSOS EM REAIS
10. PRAZO DE ENTREGA: CONFORME EDITAL DE ATÉ **30 (TRINTA) DIAS**, APÓS A DATA DE ASSINATURA DO CONTRATO E/OU RECEBIMENTO DO EMPENHO;
11. LINKS COM INFORMAÇÕES COMPLEMENTARES:
 - <http://www.grupotorino.com.br/2017/garantia.php>
 - <http://suporte.grupotorino.com.br/>
 - <https://www.kingstonstore.com.br/>
12. SUPORTE TÉCNICO: TELEFONE: 0800 201-5666, E-MAIL: SUPORTE@GRUPOTORINO.COM.BR, WEBSITE: [HTTP://SUPORTE.GRUPOTORINO.COM.BR](http://SUPORTE.GRUPOTORINO.COM.BR).

DADOS DA LICITANTE / CONTRATAÇÃO:

TORINO INFORMATICA LTDA

CNPJ 03.619.767/0005-15

IE: 083.327.90-8

IM: 4675890

AV. 600, SN – QUADRA 15 – MÓDULO 10 – SETOR INDUSTRIAL – TIMS
SERRA – ES – CEP 29.161-419

DADOS PARA CONTATO / INFORMAÇÕES:

TORINO INFORMATICA LTDA

CNPJ: 03.619.767/0001-91

IE: 669.369.347-110

IM: 114.058

RUA RITA DE CARVALHO MONTEIRO, 120 – RETIRO SÃO JOÃO

SOROCABA – SP – CEP 18085-750

CONTATO: RAFAEL MORAES

TEL/FAX: (15) 3233-9320

EMAIL: rafael.moraes@grupotorino.com.br


Rafael de Oliveira Moraes
RG: 29.944.652-9
Procurador



③



kingston.com/ssd

KC600 SSD

Unidade com criptografia automática baseada em hardware com NAND 3D TLC

O KC600 da Kingston é um SSD de capacidade total projetado para oferecer desempenho extraordinário e otimizado para proporcionar capacidade de resposta funcional do sistema com tempos incríveis de inicialização, carregamento e transferência. Ele vem em formatos de 2,5 pol e mSATA utilizando interface SATA Rev 3.0 e compatibilidade com versões anteriores. O KC600 utiliza as mais modernas tecnologias NAND 3D TLC e é compatível com um conjunto de segurança total que inclui criptografia por hardware AES de 256 bits, TCG Opal e eDrive. Ele atinge velocidades de leitura/gravação de até 550/520MB/s¹ para armazenar com eficiência seus dados com até 2TB². Ele está disponível em um kit que traz tudo o que você precisa para uma instalação ou atualização tranquila e fácil no seu desktop ou notebook.

- › Desempenho excepcional
- › Conta com a mais moderna tecnologia NAND 3D TLC
- › Compatível com um conjunto de segurança total (TCG Opal, AES 256 bits, eDrive)
- › Disponível em uma série de capacidades totais

Mais >>

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RECURSOS/BENEFÍCIOS

Desempenho excepcional — Utilizando a mais moderna tecnologia NAND 3D TLC, ele atinge velocidades de leitura/gravação de até 550/520MB/s.¹

Suíte de segurança total — Proteja e garanta a segurança dos seus dados com unidades com autcriptografia da Kingston.

ESPECIFICAÇÕES

Formato
2.5"

Interface

SATA Rev. 3.0 (6Gb/s) — compatível com versões anteriores para SATA Rev. 2.0 (3Gb/s)

Capacidades²

256GB, 512GB, 1.024GB, 2.048GB

Controlador

SM2259

NAND

3D TLC

Criptografado

criptografia XTS-AES 256-bit

Leitura/gravação sequencial¹

256GB — até 550/500MB/s
512GB-2.048GB — até 550/520MB/s

Máximo 4K leitura/gravação¹

até 90.000/80.000 IOPS

Consumo de energia

0,06W inativo / 0,2W média /
1,3W (MAX) leitura / 3,2W (MAX) gravação

Dimensões

100,1 x 69,85 x 7 mm

Dimensões

40g

Temperatura de operação

0°C a 70°C

Storage temperature

-40°C a 85°C

Vibration operating

2,17G pico (7-800 Hz)

Temperatura de armazenagem

20G pico (10-2000 Hz)

Expectativa de vida útil

1 milhão de horas MTBF

Garantia/suporte³

garantia limitada de 5 anos com suporte técnico local gratuito

Total de bytes gravados (TBW)⁴

256GB — 150TB
512GB — 300TB
1.024GB — 600TB
2.048GB — 1200TB

Formato
mSATA

Interface

SATA Rev. 3.0 (6Gb/s) — compatível com versões anteriores para SATA Rev. 2.0 (3Gb/s)

Capacidades²

256 GB, 512 GB, 1024 GB

Controlador

SM2259

NAND

3D TLC

Criptografado

criptografia XTS-AES 256-bit

Leitura/gravação sequencial¹

256GB — até 550/500MB/s
512GB-1024GB — até 550/520MB/s

Máximo 4K leitura/gravação¹

até 90.000/80.000 IOPS

Consumo de energia

0,08W inativo / 0,1W média /
1,2W (MAX) leitura / 2,4W (MAX) gravação

Dimensões

0,8 mm x 2 9,85 mm x 4,85 mm

Dimensões

7g

Temperatura de operação

0°C a 70°C

Storage temperature

-40°C a 85°C

Vibration operating

2,17G pico (7-800 Hz)

Temperatura de armazenagem

20G pico (10-2000 Hz)

Expectativa de vida útil

1 milhão de horas MTBF

Garantia/suporte³

garantia limitada de 5 anos com suporte técnico local gratuito

Total de bytes gravados (TBW)⁴

256GB — 150TB
512GB — 300TB
1024GB — 600TB

Fácil instalação/atualização — O KC600 está disponível em um kit de atualização que tem tudo o que você precisa para instalar seu drive com facilidade.

Múltiplas capacidades — O KC600 está disponível em uma variedade de capacidades totais desde 256 GB até 2 TB.²



CÓDIGO DO PRODUTO

Stand-alone 2.5" drive	Drive mSATA	Kit de atualização de PC/Notebook
SKC600/256G	SKC600MS/256G	SKC600B/256G
SKC600/512G	SKC600MS/512G	SKC600B/512G
SKC600/1024G	SKC600MS/1024G	SKC600B/1024G
SKC600/2048G		SKC600B/2048G

O kit de atualização de PC/Notebook inclui:

SSD de 2,5 pol

Compartimento USB de 2,5 pol

Suporte de 3,5 pol e parafusos de montagem

Cabo SATA de dados e energia

Adaptador de 7mm para 9,5mm

Software de Clonagem de disco rígido*

*Operating system software support: Windows® 10, 8.1, 8, 7 (SP1).

Os recursos de criptografia mencionados na seção atual são implementados no firmware do produto. As funções criptográficas do firmware podem ser alteradas apenas durante o processo de fabricação e não podem ser alteradas por um usuário comum. O produto foi projetado para instalação pelo usuário seguindo as instruções passo a passo contidas no guia de instalação do usuário que acompanha o produto e, desse modo, pode ser usado sem assistência técnica adicional por parte do fornecedor.

Este SSD foi projetado para uso com cargas de trabalho de computadores e notebooks e não foi projetado para ambientes de servidores.

1. Baseado no desempenho com as configurações de fábrica utilizando uma placa-mãe SATA Rev. 3.0. A velocidade pode variar de acordo com o hardware do host, do software e da utilização. IOMETER - Leitura/Gravação aleatória de 4K baseada em partição de 8GB.
2. Parte das capacidades listadas no dispositivo de armazenamento Flash é utilizada para formatação e outras funções e, portanto, não está disponível para armazenamento de dados. Isso significa que a capacidade real de armazenamento de dados é inferior àquela indicada nos produtos. Para mais informações, visite o Guia de Memória Flash da Kingston em kingston.com/brazil/flash_memory_guide.
3. Garantia limitada com base em 5 anos ou "Vida Restante do SSD", que pode ser encontrada usando o Kingston SSD Manager (kingston.com/SSDManager). Um produto novo, sem uso, exibirá um valor no indicador de desgaste de cem (100), enquanto um produto que atingiu seu limite de duração de ciclos de apagamento exibirá um valor no indicador de desgaste de um (1). Visite kingston.com/wa para mais detalhes.
4. O total de bytes gravados (TBW) tem origem na Carga de Trabalho do Cliente JEDEC (JESD219A).



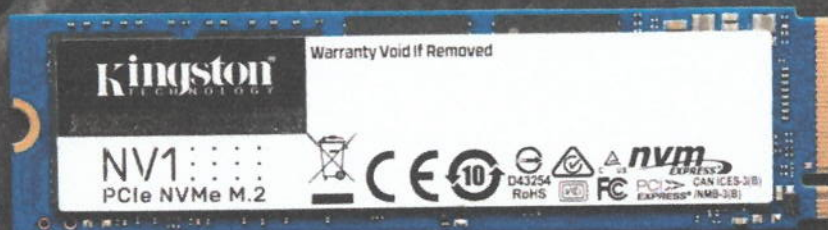
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NV1 NVME PCIE SSD

Desempenho eficiente em notebooks e computadores mais finos

O SSD NV1 NVMe™ PCIe da Kingston® é uma solução de armazenamento significativa que oferece velocidades de leitura/gravação¹ de até 2.100/1.700MB/s, sendo 3 a 4 vezes mais rápido do que um SSD baseado em SATA, e 35 vezes mais rápido do que um disco rígido tradicional. O NV1 trabalha com menos energia, menos calor e tempo de carregamento mais rápido. O desempenho eficiente do modelo M.2 2280 de lado único (22 x 80 mm) torna o NV1 ideal para notebooks finos e computadores com espaço limitado.

Disponível em capacidades de 250GB a 2TB² para proporcionar todo o espaço que você precisa para seus aplicativos, documentos, fotos, vídeos e muito mais.

- › Desempenho SSD NVMe PCIe
- › Ideal para laptops e PCs de formato pequeno
- › Capacidades de até 2TB

Mais >>

RECURSOS/BENEFÍCIOS

Performance NVMe PCIe — Oferece velocidades de leitura/gravação de até 2.100/1.700MB/s¹

Ideal para computadores com espaço limitado — Facilmente integrado em modelos com conectores M.2. Perfeito para laptops finos e PCs de formato pequeno.

Várias capacidades — Disponível em uma grande variedade de capacidades até 2TB para atender suas exigências de armazenamento.

Garantia limitada de 3 anos — Apoiado pela confiável garantia Kingston e suporte técnico local gratuito.

ESPECIFICAÇÕES

Formato

M.2 2280

Interface

NVMe™ PCIe Gen 3.0 x 4 Lanes

Capacidades²

250GB, 500GB, 1TB, 2TB

Leitura/gravação sequencial¹

2100/1700MB/s (todas as capacidades)

Resistência³

250GB – 60TBW 500GB – 120TBW
1000GB – 240TBW 2000GB – 480TBW

Consumo de energia

250GB: 5mW inativo / 85,5mW med / 0,99W (MAX) leitura / 1,5W (MAX) gravação
500GB: 5mW inativo / 205mW med / 1,1W (MAX) leitura / 3,3W (MAX) gravação
1000GB: 5mW inativo / 220mW med / 1,1W (MAX) leitura / 3,3W (MAX) gravação
2000GB: 5mW inativo / 340mW med / 1,1W (MAX) leitura / 3,3W (MAX) gravação

Temperatura de armazenamento

-40°C a 85°C

Temperatura de operação

0°C a 70°C

Dimensões

22 mm x 80 mm x 2,1 mm

Peso

7 g (todas as capacidades)

Vibração em operação

2,17G (7–800 Hz)

Vibração quando não está em operação

20G (20–1000Hz)

Tempo Médio entre Falhas (MTBF)

1,500,000 horas

Garantia/suporte⁴

garantia limitada de 3 anos com suporte técnico local gratuito



CÓDIGO DO PRODUTO

NV1 NVMe PCIe SSD

SNVS/250G

SNVS/500G

SNVS/1000G

SNVS/2000G

O SSD foi projetado para uso em cargas de trabalho em PC e notebook e não é destinado a ambientes de Servidor.

1. Baseado em "desempenho imediato" utilizando uma placa-mãe PCIe 3.0. A velocidade pode variar de acordo com o hardware do host, do software e de utilização.
2. Parte da capacidade mencionada em um dispositivo de armazenamento de memória Flash é utilizada para a formatação e para outras funções, portanto não está disponível para o armazenamento de dados. Isso significa que a capacidade real de armazenamento de dados é inferior àquela indicada nos produtos. Para obter mais informações, visite o Guia de Memória Flash da Kingston em kingston.com/Flashguide.
3. O total de bytes gravados (TBW) tem origem na Carga de Trabalho do Cliente JEDEC (JESD219A).
4. Garantia limitada com base em 3 anos ou "Percentual usado", que pode ser encontrado utilizando o Kingston SSD Manager (kingston.com/SSDManager). Para SSDs NVMe, um produto novo sem uso exibirá um valor de Percentual Usado de 0, enquanto que um produto que atinge seu limite de garantia exibirá um valor de Percentual Usado maior ou igual a cem (100). Visite kingston.com/wa para mais detalhes.



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7

Memory Module Specifications

KVR16N11/8WP

8GB 2Rx8 1G x 64-Bit PC3-12800

CL11 240-Pin DIMM

DESCRIPTION

This document describes ValueRAM's 1G x 64-bit (8GB) DDR3-1600 CL11 SDRAM (Synchronous DRAM) 2Rx8, memory module, based on sixteen 512M x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR3-1600 timing of 11-11-11 at 1.5V. This 240-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES

- JEDEC standard 1.5V Power Supply
- VDDQ = 1.5V
- 800MHz fCK for 1600Mb/sec/pin
- 8 independent internal banks
- Programmable CAS latency: 11, 10, 9, 8, 7, 6
- Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- 8-bit pre-fetch
- Burst Length: 8 (interleave without any limit, sequential with starting address "000" only), 4 with tCCD = 4 which does not allow seamless read or write (either on the fly using A12 or MRS)
- Bi-directional Differential Data Strobe
- Internal (self) calibration: Internal self calibration through ZQ pin (RZQ: 240 ohm $\pm$ 1%)
- On Die Termination using ODT pin
- Average Refresh Period 7.8us at lower than TCASE 85°C, 3.9us at 85°C < TCASE < 95°C°
- Asynchronous Reset
- PCB: Height 0.740" (18.75mm) or 1.180" (30.00mm)

SPECIFICATIONS

CL(IDD)	11 cycles
Row Cycle Time (tRCmin)	48.125ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	260ns(min.)
Row Active Time (tRASmin)	35ns(min.)
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

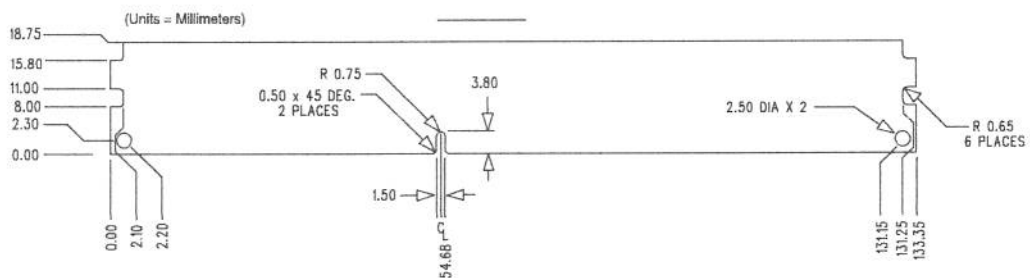
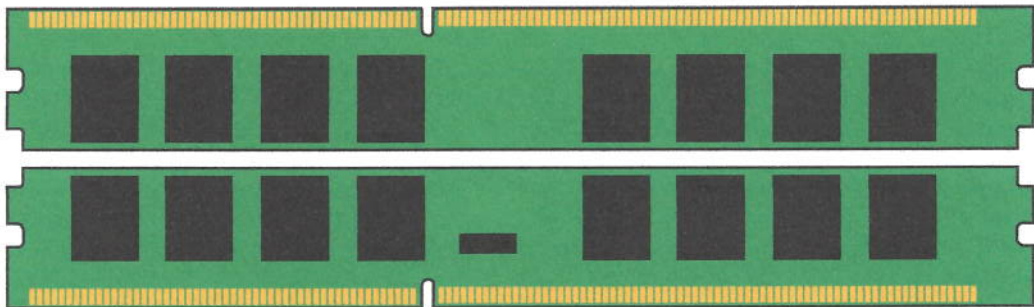
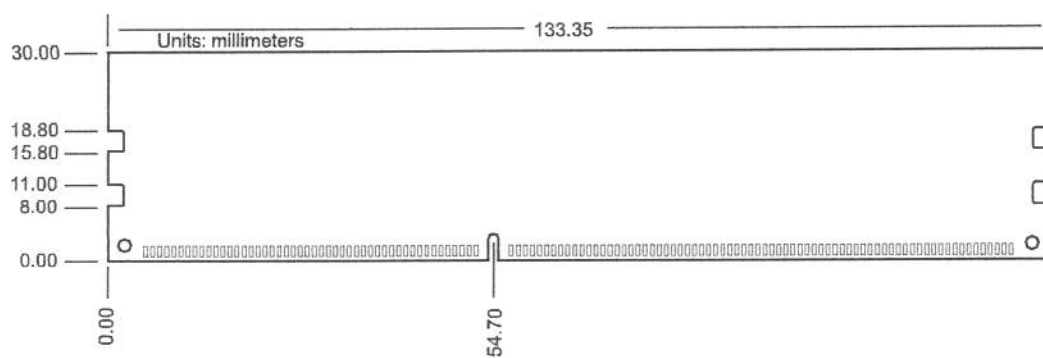
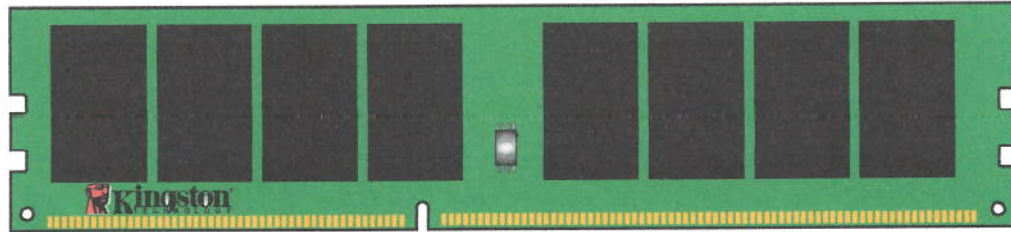
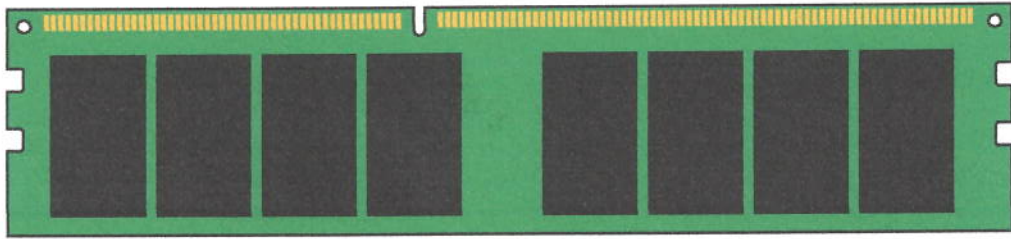
Important Information: The module defined in this data sheet is one of several configurations available under this part number. While all configurations are compatible, the DRAM combination and/or the module height may vary from what is described here.



Continued >>



MODULE DIMENSIONS



The product images shown are for illustration purposes only and may not be an exact representation of the product.
Kingston reserves the right to change any information at anytime without notice.

Memory Module Specifications

KVR16LS11/8WP

8GB 2Rx8 1G x 64-Bit PC3L-12800
CL11 204-Pin SODIMM

DESCRIPTION

This document describes ValueRAM's 1G x 64-bit (8GB) DDR3L-1600 CL11 SDRAM (Synchronous DRAM), 2Rx8, low voltage, memory module, based on sixteen 512M x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR3-1600 timing of 11-11-11 at 1.35V or 1.5V. This 204-pin SODIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES

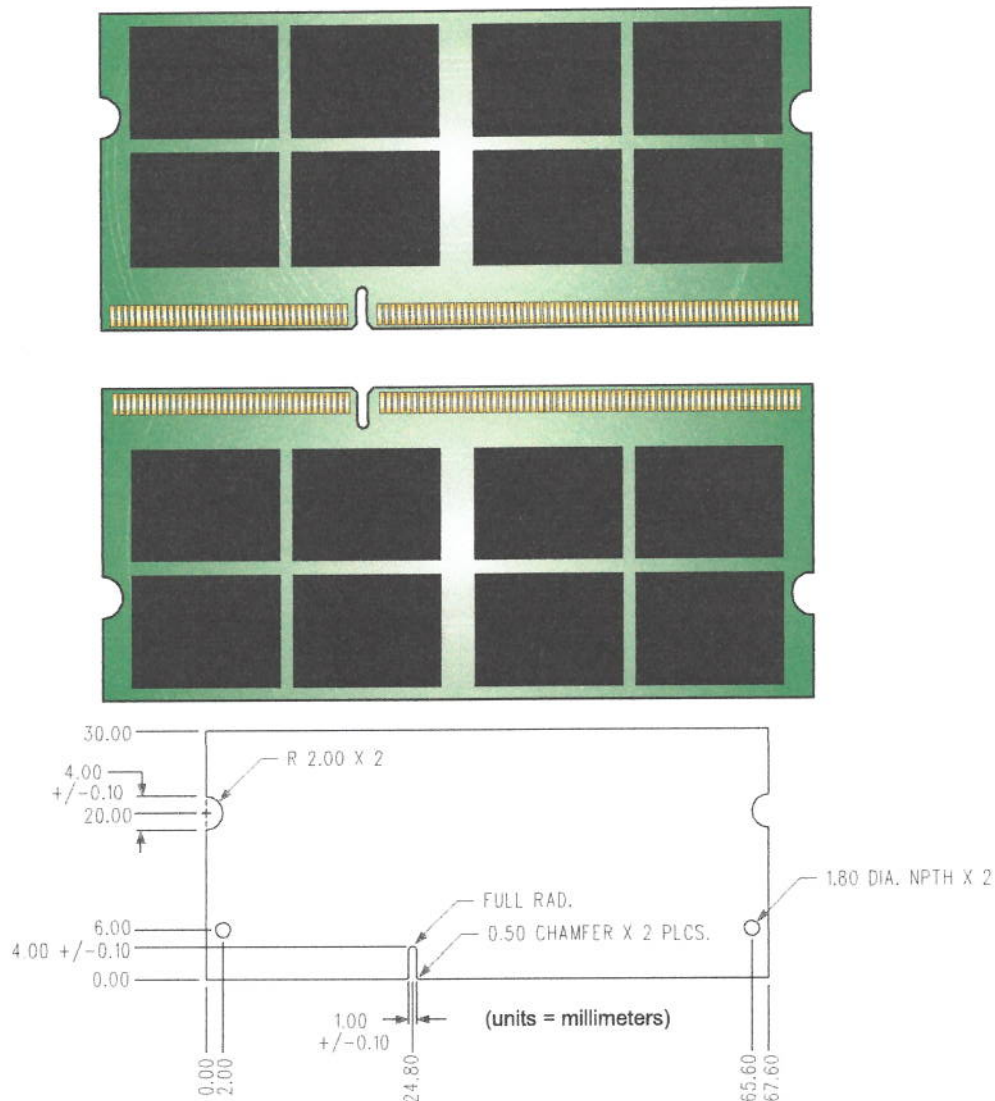
- JEDEC standard 1.35V and 1.5V Power Supply
- VDDQ = 1.35V and 1.5V
- 800MHz fCK for 1600Mb/sec/pin
- 8 independent internal bank
- Programmable CAS Latency: 11, 10, 9, 8, 7, 6, 5
- Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- 8-bit pre-fetch
- Burst Length: 8 (Interleave without any limit, sequential with starting address "000" only), 4 with tCCD = 4 which does not allow seamless read or write [either on the fly using A12 or MRS]
- Bi-directional Differential Data Strobe
- Internal(self) calibration : Internal self calibration through ZQ pin (RZQ : 240 ohm $\pm$ 1%)
- On Die Termination using ODT pin
- Average Refresh Period 7.8us at lower than TCASE 85°C, 3.9us at 85°C < TCASE $\leq$ 95°C
- Asynchronous Reset
- PCB: Height 1.18" (30mm), double sided component

SPECIFICATIONS

CL(1DD)	11 cycles
Row Cycle Time (tRCmin)	48.125ns (min.)
Refresh to Active/Refresh Command Time (tRFCmin)	260ns (min.)
Row Active Time (tRASmin)	35ns (min.)
UL Rating	94 V - 0
Operating Temperature	0° C to 85° C
Storage Temperature	-55° C to +100° C

Continued >>

MODULE DIMENSIONS:



The product images shown are for illustration purposes only and may not be an exact representation of the product. Kingston reserves the right to change any information at anytime without notice.

Memory Module Specifications

KVR26S19S8/8

8GB 1Rx8 1G x 64-Bit PC4-2666
CL19 260-Pin SODIMM

DESCRIPTION

This document describes ValueRAM's KVR26S19S8/8 is a 1G x 64-bit (8GB) DDR4-2666 CL19 SDRAM (Synchronous DRAM), 1Rx8, non-ECC, memory module, based on eight 1G x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2666 timing of 19-19-19 at 1.2V. This 260-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES

- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP = 2.5V Typical
- VDDSPD = 2.2V to 3.6V
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Single-rank
- On-board I2 serial presence-detect (SPD) EEPROM
- 16 internal banks; 4 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Fly-by topology
- Terminated control command and address bus
- PCB: Height 1.18" (30.00mm)
- RoHS Compliant and Halogen-Free

SPECIFICATIONS

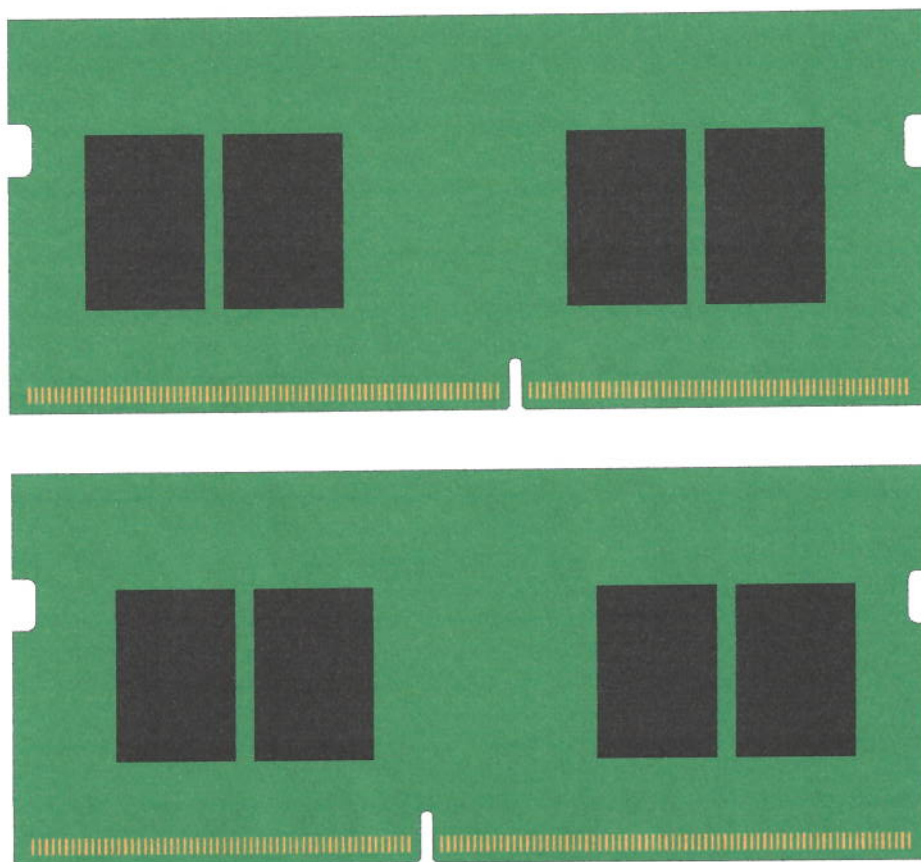
CL(1DD)	19 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

*Power will vary depending on the SDRAM used.

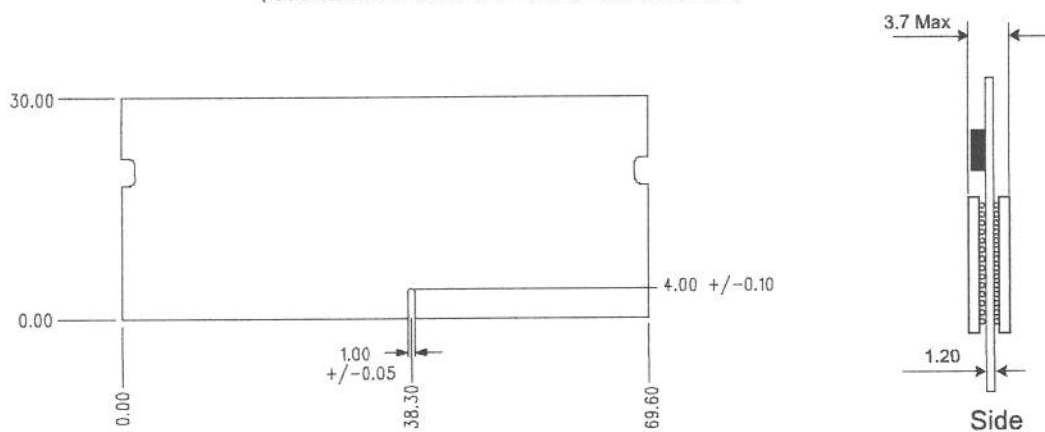
[Handwritten signatures and initials]

Continued >>

MODULE DIMENSIONS



All measurements are in millimeters.
(Tolerances on all dimensions are ± 0.12 unless otherwise specified)



The product images shown are for illustration purposes only and may not be an exact representation of the product.
Kingston reserves the right to change any information at anytime without notice.

Memory Module Specifications

KVR26N19D8/16

16GB 2Rx8 2G x 64-Bit PC4-2666
CL19 288-Pin DIMM

DESCRIPTION

This document describes ValueRAM's KVR26N19D8/16 is a 2G x 64-bit (16GB) DDR4-2666 CL19 SDRAM (Synchronous DRAM), 2Rx8, memory module, based on sixteen 1G x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2666 timing of 19-19-19 at 1.2V. Each 288-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES

- Power Supply: VDD=1.2V Typical
- VDDQ = 1.2V Typical
- VPP - 2.5V Typical
- VDDSPD=2.2V to 3.6V
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Dual-rank
- On-board I2 serial presence-detect (SPD) EEPROM
- 16 internal banks; 4 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Fly-by topology
- Terminated control command and address bus
- PCB: Height 1.23" (31.25mm)
- RoHS Compliant and Halogen-Free

SPECIFICATIONS

CL(1DD)	19 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

*Power will vary depending on the SDRAM used.



Continued >>

Front

Back

Technical drawing of a mechanical part, likely a bracket or plate, showing dimensions in millimeters. The drawing includes a top view and a side view.

Top View Dimensions:

- Overall length: 133.35
- Overall width: 31.25
- Distance from left edge to center of cutout: 64.60
- Distance from right edge to center of cutout: 56.10
- Distance from left edge to first vertical step: 2.10 ± 0.15
- Distance from left edge to second vertical step: 2.70 ± 0.15
- Distance from left edge to third vertical step: 3.35
- Distance from left edge to fourth vertical step: 28.90
- Distance from left edge to fifth vertical step: 22.95
- Distance from left edge to sixth vertical step: 14.60
- Distance from left edge to seventh vertical step: 17.60
- Distance from left edge to eighth vertical step: 8.00
- Distance from left edge to ninth vertical step: 11.00

Side View Dimensions:

- Overall height: 31.25
- Base thickness: 3.00

A pin is indicated at the bottom left corner.

Document No. VALUERAM1596-001.A00 Page

Memory Module Specifications

KVR26N19S8/8

8GB 1Rx8 1G x 64-Bit PC4-2666

CL19 288-Pin DIMM

DESCRIPTION

This document describes ValueRAM's KVR26N19S8/8 is a 1G x 64-bit (8GB) DDR4-2666 CL19 SDRAM (Synchronous DRAM), 1Rx8, memory module, based on eight 1G x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2666 timing of 19-19-19 at 1.2V. Each 288-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES

- Power Supply: VDD=1.2V Typical
- VDDQ = 1.2V Typical
- VPP - 2.5V Typical
- VDDSPD=2.2V to 3.6V
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Single-rank
- On-board I2 serial presence-detect (SPD) EEPROM
- 16 internal banks; 4 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Fly-by topology
- Terminated control command and address bus
- PCB: Height 1.23" (31.25mm)
- RoHS Compliant and Halogen-Free

SPECIFICATIONS

CL(1DD)	19 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

*Power will vary depending on the SDRAM used.

Continued >>

Memory Module Specifications

KVR26S19D8/16

16GB 2Rx8 2G x 64-Bit PC4-2666

CL19 260-Pin SODIMM

DESCRIPTION

This document describes ValueRAM's KVR26S19D8/16 is a 2G x 64-bit (16GB) DDR4-2666 CL19 SDRAM (Synchronous DRAM), 2Rx8, non-ECC, memory module, based on sixteen 1G x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2666 timing of 19-19-19 at 1.2V. This 260-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES

- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP = 2.5V Typical
- VDDSPD = 2.2V to 3.6V
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Dual-rank
- On-board I2 serial presence-detect (SPD) EEPROM
- 16 internal banks; 4 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Fly-by topology
- Terminated control command and address bus
- PCB: Height 1.18" (30.00mm)
- RoHS Compliant and Halogen-Free

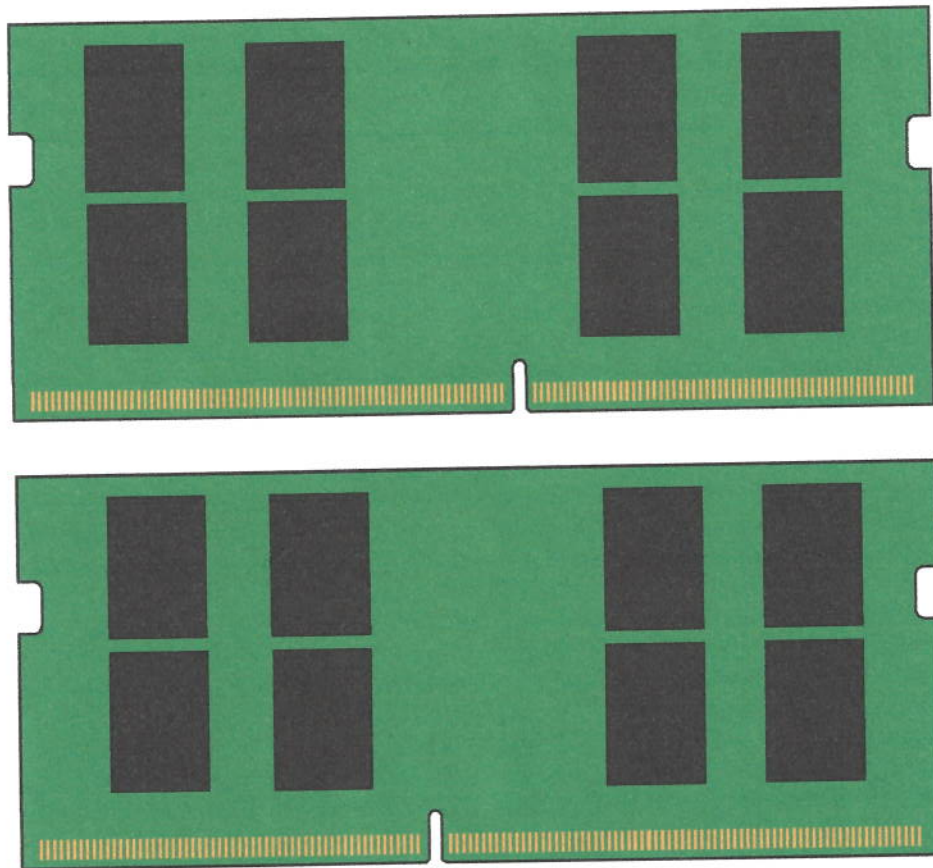
SPECIFICATIONS

CL(1DD)	19 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

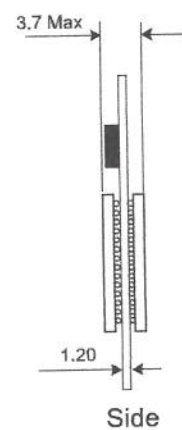
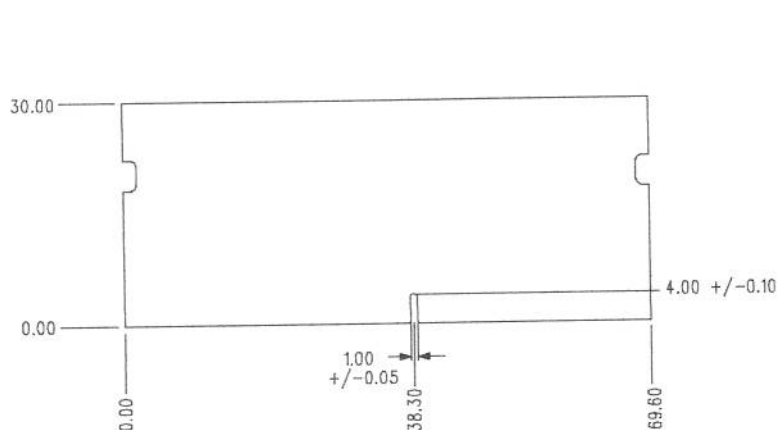
*Power will vary depending on the SDRAM used.

Continued >>

MODULE DIMENSIONS



All measurements are in millimeters.
(Tolerances on all dimensions are ± 0.12 unless otherwise specified)



The product images shown are for illustration purposes only and may not be an exact representation of the product.
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Certificate US04/3844.00

The management system of

Kingston Technology Company, Inc.

17600 Newhope Street
Fountain Valley, CA 92708, United States

has been assessed and certified as meeting the requirements of

ISO 45001:2018

For the following activities:

**Design, manufacturing, testing, packaging and marketing
of computer memory and enhancements.**

This certificate is valid from 30 June 2021 until 29 June 2022
and remains valid subject to satisfactory surveillance audits.
Recertification audit due a minimum of 60 days before the expiration date.

Issue 10: Certified since December 2019.

The organization was previously certified against OHSAS 18001 since 11 June 2004.

The audit leading to this certificate commenced on 19/04/2019.
Previous issue certificate validity date was until 29/06/2022.

This is a multi-site certification.
Additional site details are listed on subsequent pages.

Authorized by:

Dan Seal

Dan Seal

Technical Accreditation Manager,

Knowledge Solutions

SGS North America, Inc.

201 Route 17 North, Rutherford, NJ 07070, USA

t +1 201 508 3000 f +1 201 925 4555 www.us.sgs.com

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Kingston Technology Company, Inc.

ISO 45001:2018

Issue 10 : 30 June 2021



Additional facilities:

**(Building A) 17600 Newhope Street
Fountain Valley, CA 92708, United States**

**Scope: Sales, marketing and support of computer memory,
enhancement products and digital media.**

**(Building B) 17550 Newhope Street,
Fountain Valley, CA 92708, United States**

**Scope: Sales, marketing and support of computer memory,
enhancement products and digital media.**

**(Building M) 17665A Newhope Street
Fountain Valley, CA 92708, United States**

**Scope: Design, manufacturing, testing, packaging and technical
support of computer memory, enhancement products
and digital media.**

**(Building D) 17665B Newhope Street
Fountain Valley, CA 92708, United States**

**Scope: Advanced Validation Labs –Design, marketing, testing
and service of computer memory, enhancement products
and digital media.**

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Certificate CN13/30193

The management system of

Kingston Technology (Shanghai) Co., Ltd.

No. 1, Yinglun Road, China (Shanghai) Pilot Free Trade Zone, P.R. China

Unified Social Credit Code 913100007642705964



has been assessed and certified as meeting the requirements of

ISO/IEC 27001:2013

For the following activities

**Information Security Management System for Content Loading Process,
assessed in accordance with Statement of Applicability version 007.**

This certificate is valid from 4 February 2019 until 3 February 2022
and remains valid subject to satisfactory surveillance audits.
Recertification audit due a minimum of 60 days before the expiration date.
Issue 4. Certified since 4 February 2013

Authorised by

SGS United Kingdom Ltd
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
t +44 (0)151 350-6666 f +44 (0)151 350-6600 www.sgs.com

HC SGS 27001 2013 0818

Page 1 of 1



0005





此为证书 CN08/21321 译本

下述组织

金士顿科技(上海)有限公司

注册地址: 中国(上海)自由贸易试验区英伦路1号

经营地址: 中国(上海)自由贸易试验区英伦路1号



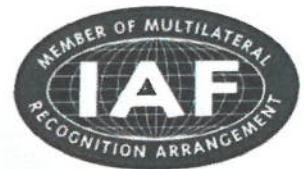
的管理体系已经过审核, 并被证明符合下述要求

ISO 14001:2015

所涉及的活动范围覆盖

计算机内存模组和闪存的制造

该证书的有效期限自 2020 年 08 月 10 日至 2023 年 08 月 09 日
并须经过符合要求的监督审核保持有效
持续认证至少在证书失效前 60 天执行
版本号 8, 初始注册日期 2006 年 03 月 13 日



签署



0005

SGS United Kingdom Ltd
Rossmore Business Park Ellesmere Port Cheshire CH65 3 EN UK
t +44 (0)151 350-6666 f +44 (0)151 350-6600 www.sgs.com

HC SGS 14001 2015 0118

第 1 页 共 1 页



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Certificate CN08/21321

The management system of

Kingston Technology (Shanghai) Co., Ltd.

Business Registration Address: No. 1, Ying Lun Road,
China (Shanghai) Pilot Free Trade Zone, P.R. China

Business Operation Address: No. 1, Ying Lun Road,
China (Shanghai) Pilot Free Trade Zone, P.R. China



has been assessed and certified as meeting the requirements of

ISO 14001:2015

For the following activities

Manufacture of computer memory modules and flash memories

This certificate is valid from 10 August 2020 until 9 August 2023
and remains valid subject to satisfactory surveillance audits.
Recertification audit due a minimum of 60 days before the expiration date
Issue 8. Certified since 13 March 2006



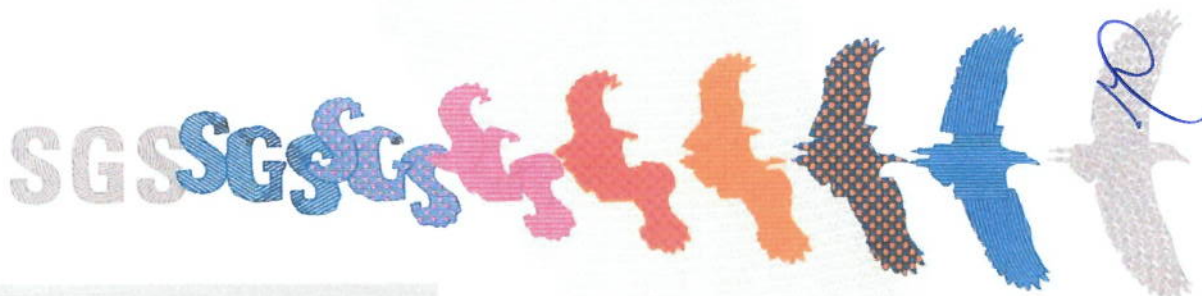
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此为证书 CN20/21177 译本

下述组织

金士顿科技(上海)有限公司

注册地址: 中国(上海)自由贸易试验区英伦路 1 号

经营地址: 中国(上海)自由贸易试验区英伦路 1 号



的管理体系已经过审核, 并被证明符合下述要求

ISO 45001:2018

所涉及的活动范围覆盖

计算机内存模组和闪存的制造

该证书的有效期自 2020 年 09 月 05 日至 2023 年 09 月 04 日

并须经过符合要求的监督审核保持有效

持续认证至少在证书到期日前 60 天执行

版本号 1 初始注册日期 2020 年 09 月 05 日

签署



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SGS United Kingdom Ltd
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
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HC SGS 45001 2018 0219 M1

Page 1 of 1



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Certificate CN20/21177

The management system of

Kingston Technology (Shanghai) Co., Ltd.

Business Registration Address: No. 1, Ying Lun Road,
China (Shanghai) Pilot Free Trade Zone, P.R. China

Business Operation Address: No. 1, Ying Lun Road,
China (Shanghai) Pilot Free Trade Zone, P.R. China



has been assessed and certified as meeting the requirements of

ISO 45001:2018

For the following activities

Manufacture of computer memory modules and flash memories

This certificate is valid from 5 September 2020 until 4 September 2023
and remains valid subject to satisfactory surveillance audits.
Recertification audit due a minimum of 60 days before the expiration date
Issue 1. Certified since 5 September 2020

Authorised by



0005

SGS United Kingdom Ltd
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
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of this document is unlawful and offenders may be prosecuted to the fullest
extent of the law.

(25)

Certificate of Registration

INFORMATION SECURITY MANAGEMENT SYSTEM - ISO/IEC 27001:2013

This is to certify that:

Kingston Technology Company, Inc.
17600 Newhope Street
Fountain Valley
California
92708
USA

Holds Certificate No:

IS 566389

and operates an Information Security Management System which complies with the requirements of ISO/IEC 27001:2013 for the following scope:

The management of information security for the protection of Kingston Technology, Kingston Digital, and Advanced Validation Lab, customers' PII and business partners' information. This is in accordance with the Statement of Applicability dated September 21, 2021.

For and on behalf of BSI:


Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2011-01-03

Latest Revision Date: 2021-11-18

Effective Date: 2020-01-03

Expiry Date: 2023-01-02

Page: 1 of 2



...making excellence a habit.™

Certificate No: **IS 566389**

Location

Kingston Technology Company, Inc.
17600 Newhope Street
Fountain Valley
California
92708
USA

Registered Activities

The management of information security for the protection of Kingston Technology, Kingston Digital, and Advanced Validation Lab, customers' PII and business partners' information. This is in accordance with the Statement of Applicability dated September 21, 2021.

Original Registration Date: 2011-01-03

Latest Revision Date: 2021-11-18

Effective Date: 2020-01-03

Expiry Date: 2023-01-02

Page: 2 of 2

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A Member of the BSI Group of Companies.

(2A)

Certificate US04/3715.00

The management system of

Kingston Technology Company, Inc.

17600 Newhope Street
Fountain Valley, CA 92708, United States

has been assessed and certified as meeting the requirements of

ISO 14001:2015

For the following activities:

**Design, manufacturing, testing, packaging and marketing
of computer memory and enhancements.**

Further clarifications regarding the scope of this certificate and the applicability of
ISO 14001:2015 requirements may be obtained by consulting the organization

This certificate is valid from 30 June 2021 until 29 June 2022
and remains valid subject to satisfactory surveillance audits.
Recertification audit due a minimum of 60 days before the expiration date.
Issue 8 . Certified since June 2004

The audit leading to this certificate commenced on 19/04/2021.
Previous issue certificate validity date was until 29/06/2022.

This is a multi-site certification.
Additional site details are listed on subsequent pages.

Authorized by:

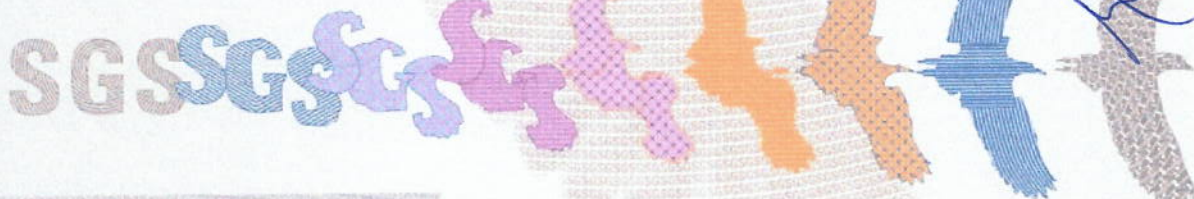
Dan Seal

Dan Seal
Technical Accreditation Manager,
Knowledge Solutions
SGS North America, Inc.

201 Route 17 North, Rutherford, NJ 07070, USA
t (201) 508-3000 f (201) 935-4555 www.us.sgs.com

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Kingston Technology Company, Inc.

ISO 14001:2015



Issue 8

Additional facilities:

(Building A) 17600 Newhope Street
Fountain Valley, CA 92708, United States

Scope: Sales, marketing and support of computer memory, enhancement products and digital media.

(Building B) 17550 Newhope Street,
Fountain Valley, CA 92708, United States

Scope: Sales, marketing and support of computer memory, enhancement products and digital media.

(Building M) 17665A Newhope Street
Fountain Valley, CA 92708, United States

Scope: Design, manufacturing, testing, packaging and technical support of computer memory, enhancement products and digital media.

(Building D) 17665B Newhope Street
Fountain Valley, CA 92708, United States

Scope: Advanced Validation Labs –Design, marketing, testing and service of computer memory, enhancement products and digital media.



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SGS

Certificate TW12/11193

The management system of

**Kingston Technology Far East Corp.
also doing business as
Kingston Technology International Ltd
Taiwan Branch and
Kingston Digital International Ltd
Taiwan Branch**

No. 1-5, Li-Hsin 1 Rd., Science Park,
Hsin Chu City 300, Taiwan, R.O.C.

has been assessed and certified as meeting the requirements of

ISO/IEC 27001:2013

For the following activities

**Information security management for Content Loading Process in
accordance with the Statement of Applicability revision 7.**

This certificate is valid from 18 February 2022 until 13 February 2024
and remains valid subject to satisfactory surveillance audits.
Recertification audit due a minimum of 60 days before the expiration date.
Issue 5. Certified since 13 February 2012

Authorised by



SGS United Kingdom Ltd
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
t +44 (0)151 350 6666 f +44 (0)151 350 6600 www.sgs.com

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Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that: Kingston Technology Far East Corp.
No. 1-5, Li-Hsin 1st Rd.
Hsinchu Science Park
Hsinchu City
300094
Taiwan

遠東金士頓科技股份有限公司
臺灣
新竹市
新竹科學工業園區
力行一路1-5號
300094

Holds Certificate No: **EMS 739666**

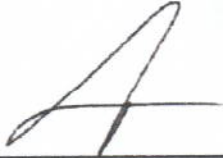
and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The manufacture of memory products.

The client is originally certified by SGS Certification with Certificate No. TW15/10407 before 2020-12-03.

記憶體產品製造

For and on behalf of BSI:


Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2015-05-11

Latest Revision Date: 2021-02-08

Effective Date: 2021-02-08

Expiry Date: 2024-02-07

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Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that: Kingston Technology Far East Corp.
No. 1-5, Li-Hsin 1st Rd.
Hsinchu Science Park
Hsinchu City
300094
Taiwan

遠東金士頓科技股份有限公司
臺灣
新竹市
新竹科學工業園區
力行一路1-5號
300094

Holds Certificate No: **OHS 739659**

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

The manufacture of memory products.

The client is originally certified by SGS Certification with Certificate No. TW17/00874 before 2020-12-03.

[Previously certified to BS OHSAS 18001:2007 since 2017-08-06]

記憶體產品製造

For and on behalf of BSI:


Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2021-02-08

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RBA-Online is the world's largest industry coalition dedicated to #CSR in global

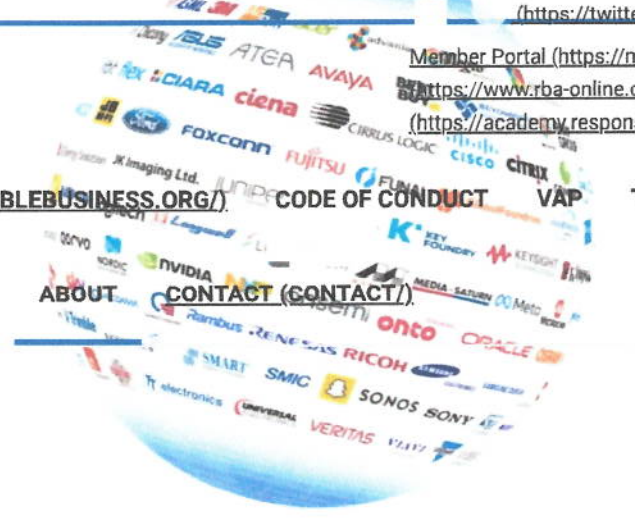
FOCUS AREAS

On June 9, RBA will host a webinar for non-member companies that would like to learn more about RBA, its initiatives, and the value of membership. Register: bit.ly/3L5tLei

(HTTPS://WWW.RESPONSIBLEBUSINESS.ORG/)

CODE OF CONDUCT VAP TOOLS INITIATIVES

EVENTS & TRAINING NEWS ABOUT CONTACT (CONTACT/)



The RBA has four membership categories: Full, Regular, Affiliate, and Supporter. View the requirements of each category [here \(join-us/\)](#). Full and Regular members are designated by an "F" or "R" following their company names below:



Jun 6, 2022

A

- AcBel Polytech Inc. - R
- Acer - R
- Advanced Micro Devices - F
- Advania AB - R
- Allegro MicroSystems
- Alphabet Inc. - R
- Altria Client Services LLC.
- Amazon.com, Inc. - R
- Amkor Technology, Inc. - R
- Amphenol Corporation
- ams OSRAM
- Analog Devices, Inc. - R
- Apple Inc. - F
- Applied Materials - R
- Arista Networks - R
- ARRIS Group - F
- ASE Technology Holding Co., Ltd.
- ASM International - F
- ASML Holding - R
- ASUSTeK Computer Inc. - F
- Atea ASA - R
- Avaya



Responsible Business Alliance
@RBAllianceOrg
Many thanks to Lucrezia Busa, Member of the Cabinet of #EU Commissioner Reynders, for sharing her views on the key strengths of the legislative proposal for #EU #DueDiligence legislation, which DG Justice co-authored, during @RBAllianceOrg's European Conference this week. #EUCSDDD

B

- Best Buy - F
- Beyondsoft International
- Block, Inc.
- BMW Group
- Bosch Sensortec - R
- Bose Corporation - R
- Broadcom, Inc.
- Brother Industries Ltd.
- BT plc
- Bullitt Group Ltd



May 13, 2022

C

- Cadence Design Systems
- Canon Inc. - R
- Celestica - R
- ChargePoint, Inc.
- Chicony Electronics Co., Ltd
- Ciena - R
- Cirrus Logic, Inc.
- Cisco - F
- Citrix
- Compal Electronics - R
- Continental AG



Responsible Business Alliance
@RBAllianceOrg
The @RBAllianceOrg's CEO Rob Lederer, @amfori_intl Pres. @Kromjong & @OECD's @aylergillan spoke about the role of

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E

- Dell Technologies - F
- Dustin AB
 - Member Portal (<https://members.responsiblebusiness.org/>)
 - RBA-Online (<https://www.rba-online.org/>)
 - eLearning Academy (<https://academy.responsiblebusiness.org/>)

F

- | RESPONSIBLE BUSINESS.ORG/ | CODE OF CONDUCT | VAP | TOOLS | INITIATIVES | FOCUS AREAS |
|---|--|-----|-------|-------------|-------------|
| <ul style="list-style-type: none"> • Efacec - R • Eaton Corporation • ecobee, Inc. • Edwards Ltd. - R | <ul style="list-style-type: none"> • Eizo Corporation • Element TV Company, LP • Ericsson - R | | | | |

G

- Fabrinet - R
- Fairphone B.V.
- First Solar Inc. - R
- Fitbit, Inc. - R
- Flex - R
- Ford Motor Company - R
- Foxconn - R
- FUJIFILM Business Innovation Corp.
- Fujitsu Limited
- Funai Electric Co., Ltd. - R

H

- GlobalFoundries - R

1

- HARMAN International
- Hasbro, Inc. - F
- Hexagon AB
- Hewlett Packard Enterprise - F
- Hi-P (Xiamen) Precision Plastics Manufacturing Co. Ltd
- Hisense USA Corporation - R
- HP Inc. - F
- Huawei Technologies Co., Ltd. - R
- Hyve Solutions - R

J

- IBM Corporation - R
- Infineon Technologies Americas Corp. - R
- Insulet Corporation
- Intel Corporation - F
- Inventec Corporation - R
- iRobot Corporation

K

- Jabil - F
- JB HI-FI Limited
- JK Imaging Ltd. - R
- Juniper Networks - R

- Keurig Dr Pepper
- KLA Corporation - R
- Key Foundry Co., Ltd.
- Konica Minolta - R
- Keysight Technologies, Inc.
- Kyndryl

- R

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CODE OF CONDUCT

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TOOLS

INITIATIVES

FOCUS AREAS

- Lam Research Corporation
- LG Energy Solution
- Lenovo - R
- Legitech Inc. - R
- Lexmark - R
- Longwell Company - R
- LG Display
- Lumentum Holdings Inc. - R
- LG Electronics - R

EVENTS & TRAINING

NEWS

ABOUT

CONTACT (CONTACT?)

M

- Marvell - R
- Media-Saturn-Holding GmbH
- Meta
- Microchip Technology Incorporated
- Micron Technology, Inc. - R
- Microsoft - R
- Mitsubishi Electric Corporation
- ModusLink
- Molex - R
- Monolithic Power Systems, Inc.
- Motorola Solutions, Inc. - R

N

- Navico
- NetApp - R
- NETGEAR - R
- New Kinpo Group - R
- Nexperia
- Nielsen
- Nikon Corporation
- Nokia Solutions and Networks Oy
- Nordic Semiconductor ASA
- Nvidia Corporation - F
- NXP Semiconductors - F

O

- onsemi - F
- Oracle America, Inc.
- Onto Innovation Inc.

P

- Palo Alto Networks
- Polestar Performance AB
- Panasonic Holdings Corporation
- Poly
- Pegatron - R
- Positivo Tecnologia S.A.
- Philips - R
- Powertech Technology Inc. - F
- Philip Morris International
- Pure Storage, Inc.
- Plexus - R

Q

- Qorvo, Inc. - R
- Quanta Computer Inc. - R
- Qualcomm - F

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• Rambus, Inc. - R

• Renesas Electronics Corporation

• Ricoh Company Ltd.

• Roku, Inc.

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VAP

TOOLS

INITIATIVES

FOCUS AREAS

EVENTS & TRAINING

NEWS ABOUT CONTACT (CONTACT/)

• Samsung Display

• Samsung Electronics - R

• Sanmina - R

• Schneider Electric

• Seagate Technology - F

• Seiko Epson Corporation - R

• Semtech Corporation

• Senju Metal Industry Co., Ltd. - R

• SFO Technologies Pvt Ltd

• Sharp Corporation

• Sierra Wireless, Inc. - R

• Signify - R

• Silicon Motion Technology Corp.

• Siltronic AG

• Simatelex Manufactory Co.

Ltd.

• Simplo Technology Co., Ltd.

• SK hynix Inc. - R

• Sky CP Ltd

• Skyworks Solutions, Inc. - F

• SMART Global Holdings - R

• Snap Inc. - R

• Sonos, Inc.

• Sony Group Corporation - F

• STMicroelectronics - F

• Sumitomo Electric

Industries, Ltd.

• Symantec

• Synopsys, Inc.

T

• Taiwan Chinsan Electronics Industrial Co., Ltd. - R

• Taiwan Semiconductor Manufacturing Company, Ltd. - F

• TCL North America - R

• TDK Group

• Technicolor SA - R

• Techtronic Industries Company Limited

• Teradyne, Inc.

• Tesla, Inc.

• Texas Instruments - R

• 3M Electronics and Energy Business Group

• Tokyo Electron Limited

• Toshiba Corp. - R

• Trimble Inc. - R

• TT Electronics Plc

U

• Universal Electronics Inc.

V

• Veritas - R

• VIAVI Solutions Inc.

• Vishay Intertechnology, Inc. - R

• Vitesco Technologies GmbH

• VIZIO Inc. - R

• Volvo Car Group

• V.S. Plus Sdn Bhd

X

A

R

(36)



KINGSTON TECHNOLOGY

Kingston Technology's Statement in Support of Ukraine - [Learn More](#)



Product Compliance

Kingston products are designed and tested to meet appropriate standards where they are sold to ensure everyone enjoys Kingston products when used for their intended purposes.

RoHS

RoHS stands for Restriction of Hazardous Substances and restricts the use of specific hazardous materials found in electrical and electronic products (known as EEE). The restricted materials identified in each region/country's RoHS requirements are hazardous to the environment, pollute landfills and are dangerous in



terms of occupational exposure during manufacturing and recycling. Kingston has worked diligently through internal design controls and supply chain declarations to ensure that all of Kingston's products and their packaging materials are compliant, according to the RoHS regulations listed



kingston®

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People-Friendly Products

Kingston products are designed with quality materials that ensure the end user's safety is top priority.

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals created by the European Chemical Agency (ECHA).

Kingston supports the European Union's objective to advance public health and safety and protect the environment by working to reduce the use of hazardous chemicals in our products. See more information on Kingston's compliance with **REACH**.

California Proposition 65

Kingston continues to strive to ensure its products created with materials that are compliant in a manner that renders a California Proposition 65 ([The Safe Drinking Water and Toxic Enforcement Act of 1986](#)) warning inapplicable. [A declaration may be provided upon request.](#)

PFOS Restriction for Environment Protection

Kingston Technology does not use Perfluorooctyl Sulfonates (PFOS) in any of its manufacturing processes.

Kingston's statement on PFOS

A limited number of wafer fabrication operations of Kingston's die component suppliers may use PFOS in their wafer manufacturing process. However, such uses are within the exemptions provided in accordance to [EU Directive 2006/122/ECOF](#) restricting the use of PFOS.

Based on the supporting data provided by Kingston's suppliers, our understanding is that PFOS does not remain in the product of any manufactured die components supplied to us, and PFOS is not contained in any Kingston product.

WEEE Directive

Kingston's Use of WEEE



The WEEE logo indicates that the equipment carrying this mark must NOT be thrown into general waste but should be collected separately and properly

processed under local regulations.

Kingston products are marked with the WEEE logo to communicate to its end users that, while re-use is generally encouraged, the product can be properly sorted and recycled when taken to an approved authorised treatment facility (AATF).

Any AATF in Europe requiring further information on Kingston's products is advised to contact the Compliance Officer at Kingston Technology Europe Co LLP / Kingston Digital Europe Co LLP.

Triman unified recycling signage

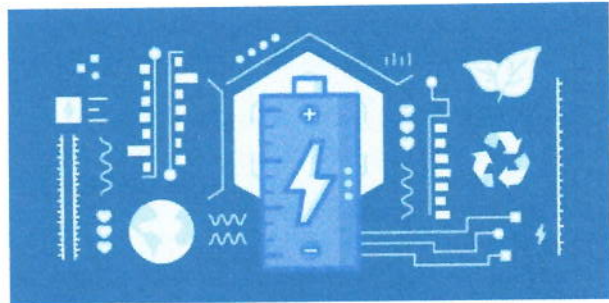
The unified Triman signage is a visual signal that tells consumers in France that the product (non-electronic devices) or its packaging can be sorted separately in order to be recycled.

How Kingston Uses Triman

Kingston products are marked with the Triman logo to communicate to its end users in France



that the product and/or its packaging can be sorted separately for recycling.



Disposal of Products Containing Batteries

Please do not dispose of your electrical or battery containing product waste with your normal household waste.

Information on Disposing of Products Containing Batteries

Electronic products must be disposed of responsibly to minimize the environmental impact. Please do not try to remove the battery from the product; it may only be removed by Kingston or a professional service provider.

Please contact our customer service department for more information on batteries and how to recycle the product responsibly in your area.

COMPANY

About

COMPLIANCE

Corporate Compliance

SUPPLY CHAIN MANAGEMENT

Sustainability

LEGAL

Terms of Use



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 [Brazil](#)

A handwritten signature in blue ink, possibly reading 'X' or 'K'.

A handwritten signature in blue ink, possibly reading 'A.'.

A handwritten signature in blue ink, possibly reading 'R'.

A handwritten signature in blue ink, possibly reading '41' inside a circle.



São Paulo, 13 de junho de 2022.

Declaração:

A Kingston Technology Company atua no mercado brasileiro através de contratos de distribuição e revenda de seus produtos.

Declaramos **que Torino Informatica Ltda, CNPJ 03.619.767/0001-91 e sua filial CNPJ: 03.619.767/0005-15** são autorizadas pela Kingston Technology Brasil Ltda, para fins de revenda dos produtos fabricados pela Kingston Technology CO.

Os produtos Kingston ofertados terão a GARANTIA e SUPORTE TECNICO LOCAL, desde que constem em nosso configurador e que atendam as instruções de configuração de cada sistema.

As trocas e substituições de produtos defeituosos deverão ser previamente autorizadas pelo suporte Kingston, cabendo a Torino Informatica, prover o novo produto ou a Kingston Brasil solidariamente.

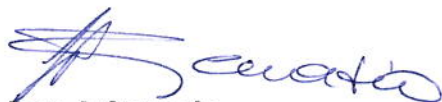
Revendedores não reconhecidos como autorizados no Brasil pela Kingston Technology tem apenas garantia internacional contra defeitos, sendo o revendedor responsável por custos de frete e impostos de importação / exportação em acordo com o usuário.

A Kingston Technology não garante compatibilidade nem se responsabiliza pela substituição de produtos no Brasil quando comercializados por revendedores não autorizados, ou pela instalação de produtos fora das especificações.

A presente declaração é válida por 06 (Seis) meses.

Para maiores informações estaremos disponíveis através do email jose.gervasio@kingston.com ou telefone 11-97617-8559

Atenciosamente,

A handwritten signature in blue ink, appearing to read "Jose A Gervasio".

Jose A Gervasio
Kingston Brasil