





# PRODUCT HIGHLIGHTS<sup>1</sup>

- Speeds start at 2133 MT/s
- Increase bandwidth by up to 30%
- Reduce power consumption by up to 40% and extend battery life
- Faster burst access speeds for improved sequential data throughput
- Optimized for next generation processors and platforms
- Available in modules up to 8GB and kits up to 32GB
- Limited lifetime warranty<sup>2</sup>

# Crucial® DDR4 SODIMMs

# More speed. More battery life. More memory capacity. Fuel your next-gen laptop.

In the ever-changing world of technology, any component more than five years old is usually in need of an update. At seven years old and counting, that's where DDR3 memory is at: laptops can only do so much with it.

Since the introduction of DDR3 memory technology in 2007, processors have doubled in capability, SSDs have revolutionized throughput, and graphics cards have drastically increased frame rates, leaving memory as a limiting factor. With Crucial® DDR4 SODIMMs, crush the DDR3 memory bottleneck and unlock a new standard of performance.



Extend battery life by using less power. Operating at just 1.2V compared to 1.5V for standard DDR3 memory, Crucial DDR4 SODIMMs consume 20% less voltage than standard DDR3 technology. Crucial DDR4 SODIMMs also contain other efficiency features, for an overall power reduction of up to 40%.1



### **More Density**

Pack more memory into your laptop than ever before. Crucial DDR4 SODIMMs debut in densities up to 8GB, and as DDR4 technology develops, modules are projected to hit 32GB—allowing you to install twice as much memory as you could in a DDR3 system. Since laptops only have 1-2 memory slots, high-density Crucial DDR4 SODIMMs allow you to overcome this limitation and install more memory for faster mobile performance.



#### **More Speed**

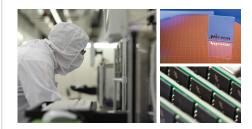
Load applications faster and run demanding programs without lag. Crucial DDR4 SODIMMs debut at 2133 MT/s-more than 30% faster than DDR3 modules.<sup>1</sup>



## **More Bandwidth**

Effortlessly multitask between apps and empower your system to fire on all cylinders. Crucial DDR4 SODIMMs increase memory bandwidth by over 30%, allowing your system to handle more data at once. Crucial DDR4 SODIMMs are optimized for next-gen platforms, allowing you to maximize bandwidth.

# Micron® quality—a higher level of reliability.



As a brand of Micron, one of the largest memory manufacturers in the world, Crucial DDR4 memory represents the future of computer performance. From the original DDR technology to DDR4, we've engineered the memory technologies that have powered the world's computers for 35 years and counting. When you choose Crucial DDR4 memory, you're choosing memory that's backed by a limited lifetime warranty and designed for the world's leading systems.<sup>2</sup> Don't settle for anything less.

# **Crucial DDR4 SODIMM Modules**



PART NUMBER	DENSITY	SPEED	LATENCY	VOLTAGE	BANDWIDTH	UPC
CT4G4SFS8213	4GB	DDR4-2133	CL15	1.2V	PC4-17000	649528768360
CT4G4SFS824A	4GB	DDR4-2400	CL17	1.2V	PC4-19200	649528774798
CT8G4SFD8213	8GB	DDR4-2133	CL15	1.2V	PC4-17000	649528768391
CT8G4SFD824A	8GB	DDR4-2400	CL17	1.2V	PC4-19200	649528774897
CT16G4SFD8213	16GB	DDR4-2133	CL15	1.2V	PC4-17000	649528773357
CT16G4SFD824A	16GB	DDR4-2400	CL17	1.2V	PC4-19200	649528773401

### Crucial DDR4 SODIMM Kits



PART NUMBER	DENSITY	SPEED	LATENCY	VOLTAGE	BANDWIDTH	UPC
CT2K4G4SFS8213	8GB Kit (2x4GB)	DDR4-2133	CL15	1.2V	PC4-17000	649528768377
CT2K4G4SFS824A	8GB Kit (2x4GB)	DDR4-2400	CL17	1.2V	PC4-19200	649528774804
CT2K8G4SFD8213	16GB Kit (2x8GB)	DDR4-2133	CL15	1.2V	PC4-17000	649528768407
CT2K8G4SFD824A	16GB Kit (2x8GB)	DDR4-2400	CL17	1.2V	PC4-19200	649528774903
CT2K16G4SFD8213	32GB Kit (2x16GB)	DDR4-2133	CL15	1.2V	PC4-17000	649528773364
CT2K16G4SFD824A	32GB Kit (2x16GB)	DDR4-2400	CL17	1.2V	PC4-19200	649528773418



<sup>1.</sup> Product performance and efficiency improvements are noted as comparisons between DDR3 and DDR4 memory technology. As of May 2014, standard DDR3 memory achieved speeds of 1600 MT/s and operated at 1.5V, compared to DDR4-2133, which will operate at 1.2V. When voltage reductions and all other energy-saving DDR4 features are factored in, DDR4 modules are projected to consume up to 40% less power. As DDR4 technology matures, speeds and bandwidths are projected to respectively hit 3200 MT/s and 25.6 GB/s – twice what was possible on DDR3 technology.

Limited lifetime warranty valid everywhere except Germany, where warranty is valid for ten years from date of purchase.