

The Dragon Series micro hard drive is a revolutionary step in storage technology, providing the highest possible capacities on a one-inch disk. By driving the size down by 30 percent, more than doubling storage capacity, and greatly increasing durability, Dragon series products are enabling a whole new generation of portable consumer electronics devices that can store all your entertainment and personal content while fitting more easily in your pocket.

Inspired by the need for smaller storage in mobile phones, the most used and abused consumer electronics product, Cornice's new micro hard drive is able to stand up to even the most extreme active lifestyle conditions.

Protected by Cornice's Crash GuardTM technology, the new drive can provide continuous and uninterrupted playback through violent shaking and careless drops without skipping, stopping or crashing. This means that OEMs can now offer even smaller, thinner consumer electronics products and enjoy the increased capacity and robustness Cornice's storage offers.

CORNICE

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Cornice Dragon Series 10GB Micro Hard Drive Features & Benefits Spec Sheet

Features & Benefits Spec Sheet		
Size	40mm x 30mm x 3.5 mm or 4.75 mm 10.5 grams - Standard Version 11.5 grams - CF Version	 Allows ultra-small, lightweight pocket-able CE devices with enriched audio and video capability Allows CE devices to be 30 percent smaller than 1.8-inch storage- based devices
Ruggedness/Durability Crash Guard™	 Able to sustain 1.5 meter drops onto hard concrete (with properly designed enclosure) Latch holds head in place during shock to minimize failures 	Enables the creation of ultra-rugged CE devices to support active lifestyles
Skip Control Drop Sensor	 Will not pause during playback while device is experiencing extreme motion (running, jumping, etc.) Adding this option enables 1.5-meter drops onto hard concrete in operational state Enabled by an external G-force sensor that detects when the end product is falling 	Ideal for hand-held products that are subject to multiple drops, especially mobile phones
Power	- 4.5mW average during typical audio playback- 8.6mW average during typical video playback-10.8mW average during typical video recording	Enables long battery life (SE-based audio players exceed 20 hours of battery life)
Capacity	10,000,000,000 Bytes - 10 GB (5,000,000,000 Bytes on each head) (also available in 8 GB)	 - 6,000 songs in WMA at 64Kbits/sec or 3,000 songs at 128Kbits/sec - 40 100-minute movies or 68.7 hours video playback on 3.5-inch screen (256x112) - 65 100-minute movies or 108 hours of video playback on 1.5-inch screen (160x64) - 33 hours of VHS-quality (352x240) recording or 7 full-length movies at DVD quality (720x480) - 12,500 pictures from a 3 mega-pixel camera - 140,000 pictures to display on a 3.5-inch screen
Transfer Rate	6 Mbytes/sec typical average	Greater than: - 375X the requirement for high-quality audio playback at 128Kbits/sec - 144X the requirement for high-quality video playback on a 3.5-inch screen at 333Kbits/sec - 72X the requirement for VHS-quality video recording at 667Kbits/sec or 26X the requirement for DVD recording at 1867 Kbits/sec
Temperature Humidity	Read: -10° to +65° C Write: 0° to +65° C 8-90 percent at a maximum wet bulb temperature of 29.4°C	Allows CE devices to sustain extreme outdoor environments
Device Lifetime	>5 years in typical use	
Media Lifetime	The SE's magnetic media has no "wear-out" modes, which restrict the number of times it can be written	Enables long lifetime for normal CE operation
Mechanical Interface	Embedded inside the CE device	
Electrical Interface	Compact Flash - True IDE mode (for embedded use)	
Supply Voltage	Able to be as low as 2.7V	
SE-Compatible Processors Available From:	Texas Instruments, SigmaTel, PortalPlayer, Intel, Motorola, Cypress and AMD	Enables fast design-in time for CE devices
Schematics/Design Review	Available by Cornice to ensure high-quality CE devices	



Available through Cornice sales reps

For complete specifications, consult the Cornice Dragon Series 10GB Micro Hard Drive Specifications Brochure, available from sales@corniceco.com

Reference Design