# **BLACK365**

## High performance, very low power consumption



BLACK365 combines the power of the Texas Instruments DM365 processor with a comprehensive set of peripherals optimized for high functionality, low power and small form factor. This low power credit card size board is ARM9® based and is designed for high performance digital media applications and supports a range of encode, decode, and video quality operations.

### Applications

The BLACK365 is suitable for applications such as:

• Video surveillance

Digital signage

- Media playback
- Camera-driven applications
- Digital video recorders
- Portable media players

• Video doorbells

### **Highly Flexible**

With the BLACK365, developers can now deliver pixel-perfect images at up to 720p H.264 at 30fps in their digital video designs without concerns of video format support, constrained network bandwidth, limited system storage capacity or cost with the new TMS320DM365 digital media processor based on DaVinci technology from Texas Instruments.

#### Low Power

DSP Design has engineered the high risk elements of the system. You receive a fully tested module. The BLACK365 is a RoHS compliant board. Low power consumption in normal operation and during sleep modes make the BLACK365 ideal for battery operated systems. The BLACK365 operates as a standalone module requiring only a single 5V input.



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#### **Reduce Your Time to Market**

Customers can add the BLACKDEV - a services board for the BLACK365 – or use BLACK365 as a "super component" in their systems. Preconfigured operating systems are available for the BLACK365. Development is speeded by the availability of the LaunchPad Application Development Kit for BLACK365.

#### Features

Processor	DM365TM processor based on the Texas Instruments DaVinci micro-architecture
Memory	128Mbytes of DDR2 SDRAM
Storage	512Mbytes of NAND Flash One Micro SD socket
Serial	Two RS232 serial ports: COM1 is 4-wire (RTS / CTS flow control) COM2 is 2-wire
Ethernet	10/100 Base-T - IEEE 802.3/802.3u compliant
USB	Four USB 2.0 high speed host ports One USB 2.0 full speed device port (available when host operation is disabled)
Displays	18-bit parallel digital display interface supporting TFT LCDs up to 800x600 resolution Analog composite video output for connection to PAL or NTSC displays
Audio	One stereo and two mono line inputs Three mono mic inputs or one stereo mic input One stereo and one mono line output Stereo headphone output
Touch Screen	4 wire resistive Touch Screen Controller
Expansion	One I2C multi-master serial bus 16-bit bus providing flexible expansion 15 general purpose I/O signals for user I/O
Real Time Clock	Battery backed Real Time Clock
Watchdog	Hardware watchdog timer
Power	Single 5V supply
Mechanical	85mm x 65mm form factor
Environmental	0 to +85° C operating temperature range

