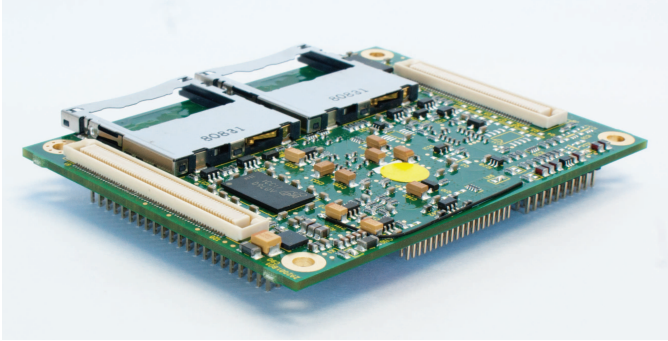


# RED320

**High Speed, Low Power, Small Footprint.**



RED320 is delivered loaded with a pre-configured Microsoft Windows Embedded CE 6.0 operating system. Drivers and utilities are preconfigured to match RED320. Development is speeded by the LaunchPad Application Development Kit for RED320 which provides the elements you need to start your project. DSP Design has engineered the high risk elements of the system. You receive a fully tested module, ready to use in your application.

## Windows Embedded CE 6.0

The RED320 is based on the XScale PXA3xx processor family. The RED320 has outstanding compute and video performance and is ideal for many embedded applications. The RED320 enjoys an extensive feature set suitable for high-end multimedia cell phones and PDAs, industrial embedded solutions and enterprise-class devices. It is a high performance credit card size single board computer optimized for use in embedded projects.

RED320 combines the power of the Marvell® XScale PXA320™ processor with a carefully selected set of peripherals optimized for high functionality, low power and small form factor.

## Flexibility

RED320 is RoHS compliant. Low power consumption and sleep modes make the RED320 ideal for energy efficient or battery operated systems. The RED320 operates as a standalone module requiring only a single 5V input. RED320 is engineered to be expanded quickly and simply by additional customer specific services boards. DSP offers the REDCONN services boards and works with customers to develop services boards to match their requirement.

## Launchpad Development Kit

The RED320 is supplied with MS Windows CE6 optimised to support the extensive feature set, thereby accelerating time to market (TTM) and return on investment (ROI). Development is speeded by the LaunchPad Application Development Kit for RED320 which provides the elements you need to start your project. DSP Design has engineered the high risk elements of the system to speed up time to market.

# RED320

## Features

<b>Processor</b>	Marvell Xscale PXA320 @ 624MHz or 806MHz
<b>Memory</b>	128Mbytes of 32-bit DDR Synchronous DRAM memory fitted as standard (soldered to the PCB)
<b>Storage</b>	2Mbytes of NOR Flash as standard 512Mbytes of NAND Flash as standard Higher capacities available for volume orders
<b>SD Sockets</b>	Two Secure Digital (SD) sockets suitable for 3.3V memory and I/O cards, providing both memory and peripheral expansion
<b>Display</b>	16-bit TFT LCD interface. Capable of driving TFT panels with resolutions up to 800 x 600. Interface to many displays via add on modules. Includes backlight Control
<b>USB</b>	2 x USB 1.1 Host
<b>Serial</b>	3 channels RS232
<b>Ethernet</b>	10/100 Base-T - IEEE 802.3/802.3u compliant
<b>Audio</b>	AC97 CODEC provides mono speaker output, mono microphone input and stereo line output
<b>Touch Screen</b>	4 wire resistive Touch Screen Controller
<b>Expansion</b>	One I2C serial bus 16-bit bus providing flexible expansion 29 general purpose I/O signals for user I/O
<b>Real Time Clock</b>	Battery backed Real Time Clock
<b>Watchdog</b>	Hardware watchdog timer. Timeout period of 1.4s
<b>Mechanical</b>	85mm x 65mm form factor
<b>Power</b>	Single 5V supply -typical consumption of 1.3W
<b>Environmental</b>	-20 to +85° C operating temperature range