Dsp AC uninterruptible power supply

What is an uninterruptible power supply (UPS)?
An Uninterruptible Power Supply, or UPS, is an electronic device that provides an alternative electric power supply to connected electronic equipment when the primary power source is not available.

Why should you use a DSP engine & IPP?
The built-in DSP engine and IPP help in optimizing control loop design,being able to produce a clean sine wave output (THD less than 3%) even with a rectifier load and a crest factor of 3:1.

What is microchip dsPIC DSC?
The Microchip dsPIC DSC device provides all of the necessary power peripherals used for power conver-sion applications. It is a highly flexible Intelligent Power Peripheral(IPP),ADC,Comparator,and PWM mod-ules simplify the hardware schematic and reduces the number of components in the design of a high-perfor-mance UPS system.

What are the DSP instructions in dsPIC DSC?
The DSP instructions of the dsPIC DSC device are uti-lized to efficiently execute the RMS calculation rou-tines. The Q15 library includes functions for calculating sum-of-squares and square-root. Both of these opera-tions are available in the Q15 library,and are used for implementing the RMS calculation in the offline UPS reference design.

Pyramid DSP premium series makes a difference with its 3-phase input-3 phase output and 10kVA-400kVA output power, IGBT rectifier/ IGBT inverter and high efficiency.

Microchip's Digital Pure Sine Wave Uninterruptible Power Supply (UPS) Reference Design is based on the dsPIC33F "GS" series of digital-power Digital Signal Controllers ...

Thus the need for an uninterruptible power supply (UPS) which is capable of resolving these problems. Taking these considerations into account, a three to single phase converter ...

10KVA 220V Uninterruptible Power Supply (Online type UPS) Quick Detail: Online Type UPS-5KVA to 200KVA Dimension (W×D×H)mm: 550×485×200 Weight: 200kg Description: In the ...

Download scientific diagram | Typical DC uninterruptible power supply (UPS) system with on-board DSP architecture. from publication: Load invariant buck converter - ...

This paper implements the design of an uninterruptible power supply control system based on TMS320F28335, which can realize multiple control loops of online UPS in a single chip, ...

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