

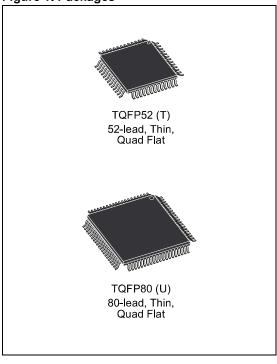
## uPSD3254A, uPSD3254BV uPSD3253B, uPSD3253BV

Flash Programmable System Devices with 8032 Microcontroller Core and 256 Kbit SRAM

## **FEATURES SUMMARY**

- FAST 8-BIT 8032 MCU
  - 40MHz at 5.0V, 24MHz at 3.3V
  - Core, 12-clocks per instruction
- DUAL FLASH MEMORIES WITH MEMORY MANAGEMENT
  - Place either memory into 8032 program address space or data address space
  - READ-while-WRITE operation for In-Application Programming and EEPROM emulation
  - Single voltage program and erase
  - 100K minimum erase cycles, 15-year retention
- CLOCK, RESET, AND SUPPLY MANAGEMENT
  - SRAM is Battery Backup capable
  - Normal, Idle, and Power Down Modes
  - Power-on and Low Voltage reset supervisor
  - Programmable Watchdog Timer
- PROGRAMMABLE LOGIC, GENERAL PURPOSE
  - 16 macrocells
  - Implements state machines, glue-logic, and so forth
- COMMUNICATION INTERFACES
  - USB v1.1, low-speed 1.5Mbps, 3 endpoints
  - I<sup>2</sup>C Master/Slave bus controller
  - Two UARTs with independent baud rate
  - Six I/O ports with up to 46 I/O pins
  - 8032 Address/Data bus available on TQFP80 package
  - 5 PWM outputs, 8-bit resolution
- JTAG IN-SYSTEM PROGRAMMING
  - Program the entire device in as little as 10 seconds

Figure 1. Packages



- A/D CONVERTER
  - Four channels, 8-bit resolution, 10µs
- TIMERS AND INTERRUPTS
  - Three 8032 standard 16-bit timers
  - 10 Interrupt sources with two external interrupt pins
- Single Supply Voltage
  - 4.5 to 5.5V
  - 3.0 to 3.6V

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