

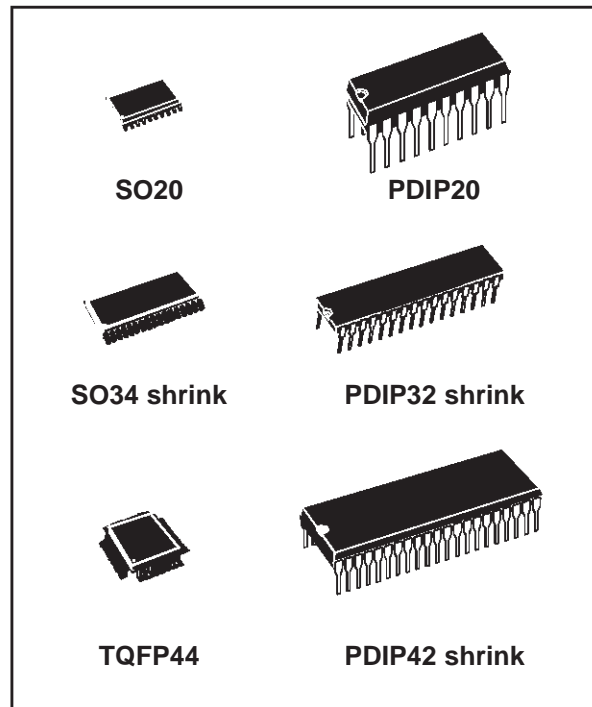


ST7262

LOW SPEED USB 8-BIT MCU WITH 3 ENDPOINTS, FLASH MEMORY, LVD, WDG, 10-BIT ADC, 2 TIMERS, SCI, SPI

DATA BRIEFING

- 8K or 16K Program memory (ROM, FASTROM or Dual voltage FLASH) with read-write protection
- 384 to 768 bytes RAM memory (128 bytes stack)
- In-Situ Programming for FLASH versions
- Enhanced Reset System (Power On Reset)
- Low Voltage Detector (LVD)
- 3 Power saving modes
- USB (Universal Serial Bus) Interface with DMA for low speed applications compliant with USB 1.5 Mbs specification (v 1.1) and USB HID specification (v 1.0):
 - Integrated 3.3V voltage regulator and transceivers
 - Suspend and Resume operations
 - 3 Endpoints
- Up to 31 multifunctional bidirectional I/O lines with:
 - Up to 12 External interrupts (2 vectors)
 - 13 alternate function lines
 - 8 high sink outputs (8mA@0.4 V/20mA@1.3)
 - 2 true open drain pins (N buffer 8mA@0.4 V)
- Clock-out capability
- Configurable watchdog reset (8 to 500ms timeout)
- Two cascadable 8-bit timers:
 - Auto Reload Timer with 2 Input Captures, 2 PWM outputs and External Clock Input
 - Time Base Unit (TBU) for generating periodic interrupts.
- Asynchronous Serial Communication interface



- Synchronous Serial Peripheral Interface
- 10-bit A/D Converter with up to 8 input pins.
- 8-bit data manipulation
- 63 basic instructions
- 17 main addressing modes
- 8 x 8 unsigned multiply instruction
- True bit manipulation
- Full hardware/software development package

Device Summary

Features	ST72623F2	ST72622K2	ST72622K4	ST72622L2	ST72622L4	ST72621J4
Program memory - bytes	8K	8K	16K	8K	16K	16K
RAM (stack) - bytes	384 (128)	384 (128)	512 (128)	384 (128)	512 (128)	768 (128)
Peripherals	USB, Watchdog, Low Voltage Detector, 8-bit Auto-Reload timer, Timebase unit, A/D Converter					
Serial I/O	-	SPI	SPI	SPI	SPI	SPI + SCI
I/Os	11	21	21	23	23	31
Operating Supply	4.0V to 5.5V					
Oscillator Frequency	6 or 12 MHz					
Operating Temperature	0°C to +70°C					
Packages	PDIP20/SO20	PDIP32		SO34		PDIP42/TQFP44

Rev. 0.4

1 GENERAL DESCRIPTION

1.1 INTRODUCTION

The ST7262, ST72P62 and ST72F62 devices are members of the ST7 microcontroller family designed for USB applications.

All devices are based on a common industry-standard 8-bit core, featuring an enhanced instruction set.

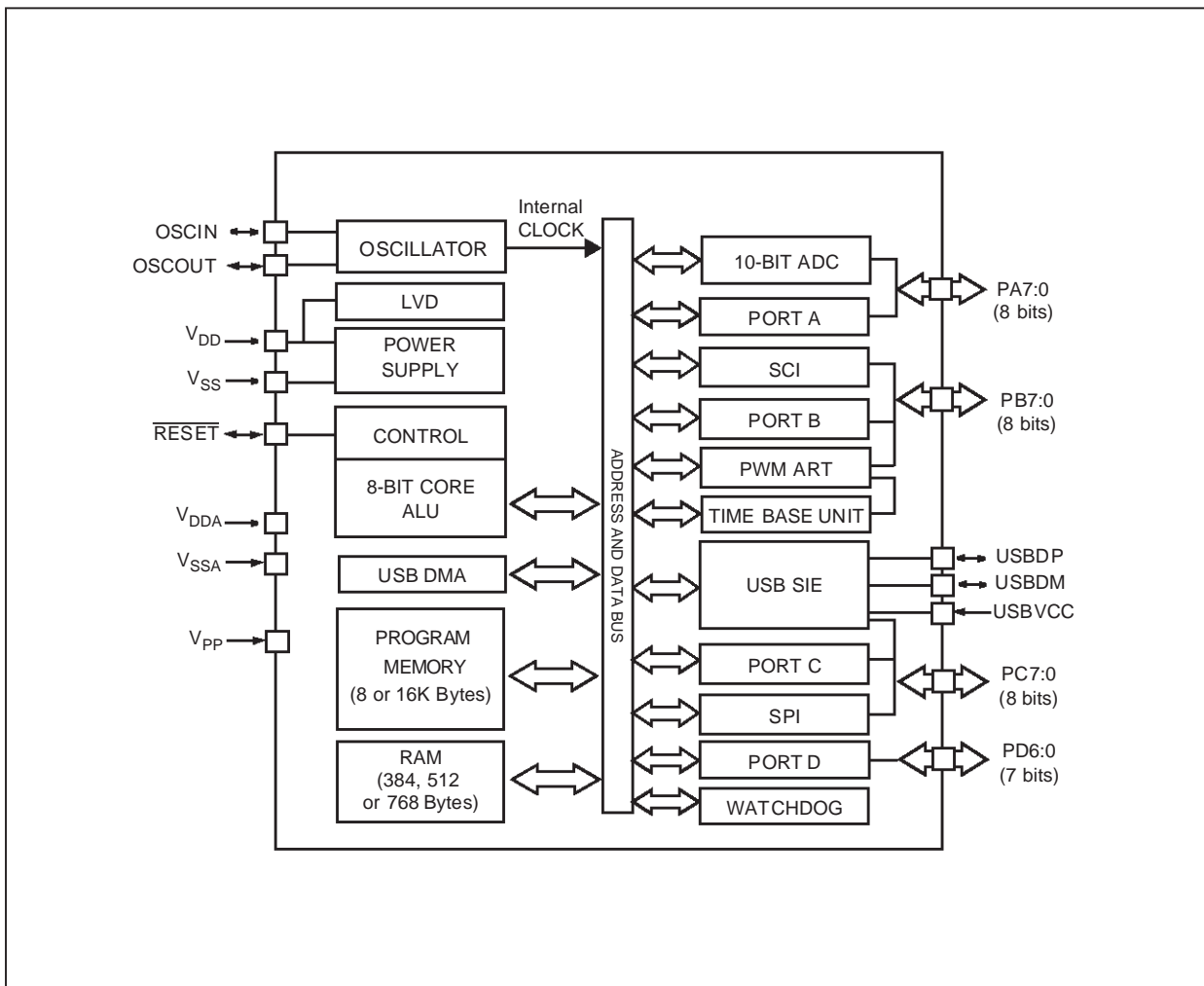
The ST7262 ROM and ST72P62 FASTROM devices are factory-programmed and are not reprogrammable.

The ST72F62 versions feature dual-voltage FLASH memory with In-Situ Programming (ISP) capability.

Under software control, all devices can be placed in WAIT, SLOW, or HALT mode, reducing power consumption when the application is in idle or standby state.

The enhanced instruction set and addressing modes of the ST7 offer both power and flexibility to software developers, enabling the design of highly efficient and compact application code. In addition to standard 8-bit data management, all ST7 microcontrollers feature true bit manipulation, 8x8 unsigned multiplication and indirect addressing modes.

Figure 1. General Block Diagram



Notes:

Information furnished is believed to be accurate and reliable. However, STMicroelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of STMicroelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. STMicroelectronics products are not authorized for use as critical components in life support devices or systems without the express written approval of STMicroelectronics.

The ST logo is a registered trademark of STMicroelectronics

©2000 STMicroelectronics - All Rights Reserved.

Purchase of I²C Components by STMicroelectronics conveys a license under the Philips I²C Patent. Rights to use these components in an I²C system is granted provided that the system conforms to the I²C Standard Specification as defined by Philips.

STMicroelectronics Group of Companies

Australia - Brazil - China - Finland - France - Germany - Hong Kong - India - Italy - Japan - Malaysia - Malta - Morocco - Singapore - Spain
Sweden - Switzerland - United Kingdom - U.S.A.

<http://www.st.com>