

### The Fundamental PCI Audio

#### Introduction

The ForteMedia FM801-AS is designed to suit the most cost-effective, practical, PCI Audio solution for both desktop computer and notebook computer. It integrates the essential features of today's gaming requirements without compromising the PC98 criterion for audio quality. FM801-AS integrates the PCI 2.2 bus master controller, music synthesis, SoundBlaster Pro Engine, sampling rate converter, digital mixer, CODEC interface, game ports, I2S ports and S/PDIF port. The FM801 solution leverages its simple but effective hardware/software architecture and the uprising HSP (host-based signal processing) support on Direct Sound, WaveTable and Direct 3D positional audio, and is therefore the most practical PCI audio solution. The CODEC interface is fully compliant to AC-97 ver.2.1 and is capable of supporting multiple speakers for either docking application or merely a PC theater set up for gaming and audio enjoyment. With its 3.3 volts operating voltage, ACPI power management, PME and PCI clock-run supports, plus a small 100-pin PQFP package size, the FM801 sure is the right choice for today's PCI audio solution.

#### Features

- PCI v.2.2 compliance with bus master and scatter-and-gathering capability
- Real DOS SoundBlaster Pro support
- Serial IRQ and PC/PCI support
- Built-in music synthesis for AdLib compatibility
- Built-in SRC (sampling rate converter) and digital mixer
- AC-97 ver. 2.1 Compliance
- Multiple speakers support
- Dual game ports and Analog/Digital Joystick Interface (Direct Input support)
- I2S ports and S/PDIF digital output port
- Hardware push button volume control
- ACPI, PME, and PCI CLKRUN power management
- MPU-401 port
- EEPROM interface support (24C00/01, 93C57)
- Professional 64 Voices Software WaveTable supporting .MID (General MIDI) and .RMF (Rich Music Format) files.
- Efficient HSP dynamic 3-D positional audio support
- DOS box/WinNT/Win95/Win98/WDM drivers
- 3.3V with 5V tolerance
- 100 pin PQFP package, 14 x 14 x 1.4mm

#### FM801-AS Block Diagram

