

## PROPELLER INFORMATION



### **Where is the Propeller used?**

The Propeller is used in many industries including manufacturing, process control, robotics, automotive and communications. Hobbyists and Engineers alike are finding new uses for this powerful microcontroller every day.

The Propeller chip makes it easy to rapidly develop embedded applications. Its eight processors (cogs) can operate simultaneously, either independently or cooperatively, sharing common resources through a central hub. The developer has full control over how and when each cog is employed; there is no compiler-driven or operating system-driven splitting of tasks among multiple cogs. A shared system clock keeps each cog on the same time reference, allowing for true deterministic timing and synchronization. Two programming languages are available: the easy-to-learn high-level Spin, and Propeller Assembly which can execute at up to 160 MIPS (20 MIPS per cog).

### **Who uses the Propeller?**

Due to its diversity, the Propeller Chip may be used for many types of applications. Most users appreciate the overall processing power and I/O capabilities. Hobbyists like the powerful yet easy language while robot builders and process control engineers appreciate the parallel processing capabilities. Many find the on-board video generation and easy connection to popular PC peripherals reduces the need for additional support components.

### **What do you need to get started?**

To get started you need a Propeller Chip and a USB Serial connection to the chip. Some of our development boards and modules have this capability built-in while some require a Prop Plug or Prop Clip. Our affordable Propeller Starter Kit and Propeller Education Kits (40-Pin DIP Version and PropStick USB Version) are all good starting places for many interested hobbyists and students.

### **Why should you use the Propeller?**

The Propeller Chip can free system designers from the constraints of many modern microcontroller systems in both hardware and software. The Propeller puts the fun back into design and programming while providing the power and flexibility required in today's microcontroller-powered applications.