

# XC9500XV

## High-Performance 2.5V ISP CPLD

*Manufactured on the latest generation FastFLASH process, the XC9500XV family is the industry's first 2.5V CPLDs, providing power savings of up to 75% over current 5V CPLDs, at a lower cost.*

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**T**he XC9500XV family provides the same advanced architectural features and densities as our popular 3.3V XC9500XL family introduced last year.

The advanced architecture of both families allows for easy design implementation, so you can concentrate on system design rather than on chip-level details. The unique features of

the architecture include a 54-input block fan-in which contributes to superior pin-locking capability; built-in input hysteresis for improved noise margin; bus-hold circuitry for better I/O control; hot-plugging to eliminate the need for power sequencing; and local/global clock control to provide maximum flexibility to each individual macrocell.

### High Performance Through Advanced Process Technology

The advanced FastFLASH process used in the XC9500XV allows for high performance versions, with pin-to-pin delays as low as 3.5 nanoseconds and system frequencies as fast 225 MHz by the end of 1999.

The XC9500XV devices are also optimized for in-system programming (ISP) and features the industry's most extensive IEEE 1149.1 JTAG support. Manufacturing, testing, program-

ming, and field-upgrading of CPLD-based electronic products can be easily streamlined through the use of ISP and the Java API for Boundary Scan programming standard.

With the introduction of the XC9500XV family, Xilinx now offers a complete 2.5V programmable logic solution, from the 36-macrocell XC9536XV CPLD to the one-million gate Virtex XCV1000 FPGA.  $\Sigma$

### The XC9500XV Family at a Glance

	XC9536XV	XC9572XV	XC95144XV	XC95288XV
Macrocells	36	72	144	288
Fastest tpd (ns)	3.5/4/5/7	4/5/7/10	4/5/7/10	5/7/10/15
Highest Fsys (MHz)	225	200	200	178
Package Options (User I/O)	PC44 (34) VQ64 (34)  CS48 (36)	PC44 (34) VQ64 (52) TQ100 (72)  CS48 (36)	TQ100 (81) TQ144 (117)  CS144 (117)	TQ144 (117) PQ208 (168) BG256 (168) CS280 (168)

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