

Introducing The New, Low-Power XC7336Q EPLD

The latest addition to the fast-growing XC7300 EPLD family is a low-power version of the XC7336 called the XC7336Q.

The XC7336Q offers all of the benefits of the advanced XC7300 architecture, including 100 percent routing with 100 percent utilization, SMARTswitch, 24mA output drive and 3.3V/5V level translation. Furthermore, like the other XC7300 family members, the XC7336Q-10 is 100 percent PCI compliant.

The XC7336Q differs from the standard XC7336 in terms of power consumption — the Q version consumes **60 percent less power**. Also, the XC7336Q is available only in -10, -12 and -15 speed grades.

PAL and GAL users are already familiar with the Q nomenclature — in the

PAL/GAL world, a Q (for Quarter power) CMOS PAL typically functions at one-fourth the

I_{CC} of the equivalent PAL.

Power-conscious PAL users will find the XC7336Q to be extremely appealing, as the XC7336Q will integrate three 22V10s while consuming only **one sixth** the power of

those devices.

The XC7336Q EPLD is ideal for space-constrained electronic systems, including

DEVICE	SPEED	LOWEST COST	LOWEST POWER	PACKAGES
XC7336 - 5,7,10,12,15	✓	✓		PC44, WC44, PQ44
XC7336Q - 10,12,15			✓	PC44, WC44, PQ44, VQ44

computing, peripherals and consumer applications. Board space and airflow limitations tend to make such applications highly sensitive to power consumption and system noise. Low I_{CC} specifications combined with low-profile packaging options make the XC7336Q a high integration PAL-like solution that fits small form factor and power constraints and enhances a design's overall reliability and noise immunity.

Above is a selection guide to help choose the best XC7336 product for your needs. Note that there are instances where the standard XC7336 is a better choice than the XC7336Q.

The XC7336Q will be fully supported (explicitly) in DS-550 Rev. 6.0. However, users can begin designs immediately with DS-550 v5.1 by using the standard XC7336 as the target device. Programming support on the HW-130 programmer will be available by the end of May, and all major third party programmers will be on-line in July.

Engineering samples of the XC7336Q will be available by the end of May, with volume shipments by the end of June. ♦

