Texas Instruments

Advanced System Logic SPOTLIGHT

AHC features

- Gates, flip-flops and bus functions
- Available in TTL and CMOS compatible versions
- Low noise; high-noise immunity
- 2.0V to 5.5V supply voltage
- 5.2ns typical propagation delay, 8.5ns maximum ('244/'245)

Available now:

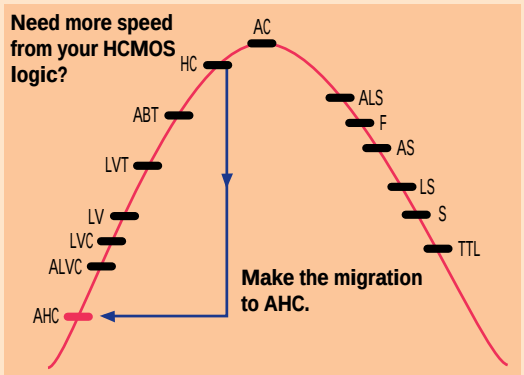
AHC00	AHCT00
AHC04	AHCT04
AHCU04	
AHC08	AHCT08
AHC14	AHCT14
AHC32	AHCT32
AHC86	AHCT86
AHC240	AHCT240
AHC244	AHCT244
AHC245	AHCT245

Planned:

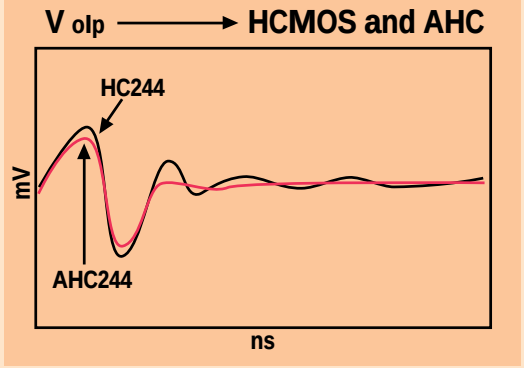
AHC74	ACHT74
AHC125	AHCT125
AHC126	AHCT126
AHC373	AHCT373
AHC374	AHCT374
AHC540	AHCT540
AHC541	AHCT541
AHC573	AHCT573
AHC574	AHCT574

+ MORE

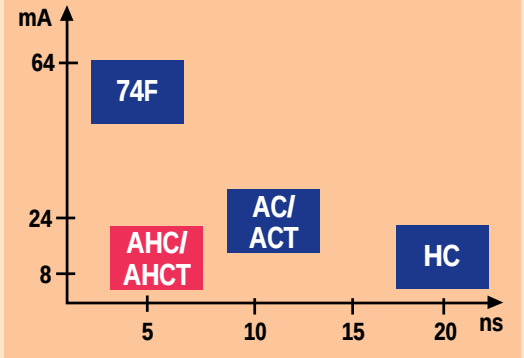
Available in TSSOP(PW), SSOP(DB), SOIC(D,DW) and PDIP(N) packages. Selected AHC devices will be available in Military version.



Products' Maturity Curve



Low noise - similar to HCMOS



Higher speeds for lower drive needs

AHC provides three times faster performance to HCMOS users

AHC is the family of choice for the natural migration of HCMOS users who need more speed for their low-power / low-noise / low-drive applications.

Speed

With typical propagation delays of 5.2ns (octals), roughly three times faster than HC, AHC is the quick and quiet solution for higher speed operation.

Low-noise

AHC allows designers, who like the low noise characteristics of HCMOS, to design at today's performance levels without the overshoot/undershoot problems typical of higher drive devices usually required to get AHC speeds.

Low-power

Since AHC uses CMOS technology, the designer gets low power consumption (40 µAmps max. static current). Half that of HCMOS.

Drive

Output current; ± 8mA with 5V Vcc,
± 4mA with 3.3V Vcc

Your advantage

While one would normally expect to pay a 15-20 percent performance premium for the next generation in a CMOS technology, AHC is priced similarly to the HCMOS.