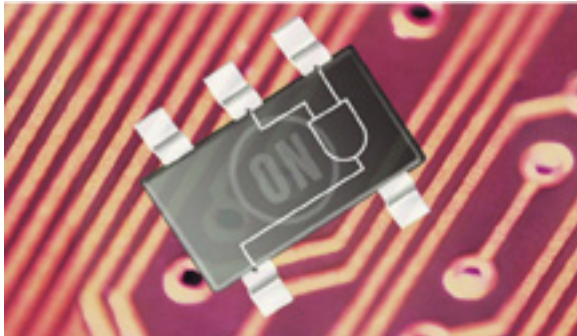


Logic Devices



The MC74VHC1GxxxDFT1 CMOS One-Gate logic devices, are single gate solutions derived from a multi-gate standard logic function. They are packaged in tiny 5-pin SOT-353 (SC-88A) and can fit almost anywhere on a circuit board. They are ideal for improving routing, reducing noise, ground bounce and EMI in high-density circuit designs. The initial product offering consists of 15 devices representing the most popular AND, NAND, OR and XOR gates.

Features include: high speed (typical propagation delay = 3.7 nS typical @ VCC = 5 V); low standby current (ICC = 2 mA maximum @ T_A = 25°C); CMOS compatible inputs; over-voltage protection on inputs; balanced propagation delays; latch-up performance exceeds 300 mA; serves both VHC and AHC performance ranges; miniature 5-lead SOT-353 (SC-88A) package; pin and function compatible with competitive One-Gate product offerings.

Benefits of these devices include the following: low cost single logic function solutions; designers only use functions needed; minimal package cost; circuit board space savings of approximately 70%; miniature package fits almost anywhere; board layout design simplification; ground bounce reduction; EMI reduction, shorter runs; single logic function problem solving option; high noise immunity; high speed/low power dissipation; CMOS level output swing.

Applications for these devices include the following: high-density/small physical size applications; battery powered equipment; telecom/networking — analog switching, circuit logic, board fixes; consumer-improved routing — glue logic; PC - "Quick-Fix" error correction; displays; automotive.

Source URL (retrieved on 01/28/2015 - 11:33am):

http://www.wirelessdesignmag.com/product-releases/2001/04/logic-devices?qt-most_popular=0