

Title (en)

AT-SPEED BUILT-IN SELF TESTING OF MULTI-PORT COMPACT sRAMs

Title (de)

HOCHGESCHWINDER EINGEBAUTER SELBSTTEST FÜR KOMPAKTEN MULTI-PORT SRAMS

Title (fr)

AUTO-TEST INTEGRE A FREQUENCE DE FONCTIONNEMENT NOMINALE DE MEMOIRES STATIQUES COMPACTES MULTI-PORT

Publication

**EP 1338014 A1 20030827 (EN)**

Application

**EP 00974208 A 20001109**

Priority

CA 0001306 W 20001109

Abstract (en)

[origin: WO0239458A1] A built-in self test (BIST) for a multi-port compact sRAM (CsRAM) uses a BIST controller which operates at the speed of the system, while the CsRAM is tested at the memory speed. The circuitry for testing allows multiple random accesses of the CsRAM per system clock cycle. In this way, timing-related defects in the CsRAM can be detected. The CsRAM is virtually partitioned into "k" sections, the sections being tested simultaneously from different ports with identical and complementary test data. A conventional (BIST) controller can be used with minimal addition of hardware in a collar arranged around the memory array.

IPC 1-7

**G11C 29/00**

IPC 8 full level

**G01R 31/28** (2006.01); **G11C 11/413** (2006.01); **G11C 29/04** (2006.01); **G11C 29/10** (2006.01); **G11C 29/12** (2006.01); **G11C 29/56** (2006.01)

CPC (source: EP KR)

**G11C 11/41** (2013.01 - KR); **G11C 29/10** (2013.01 - EP); **G11C 29/12** (2013.01 - EP)

Citation (search report)

See references of WO 0239458A1

Designated contracting state (EPC)

AT BE CH DE FR GB LI

DOCDB simple family (publication)

**WO 0239458 A1 20020516**; CA 2426040 A1 20020516; CN 1460269 A 20031203; EP 1338014 A1 20030827; JP 2004512630 A 20040422; KR 20030068145 A 20030819

DOCDB simple family (application)

**CA 0001306 W 20001109**; CA 2426040 A 20001109; CN 00820008 A 20001109; EP 00974208 A 20001109; JP 2002541689 A 20001109; KR 20037005971 A 20030429