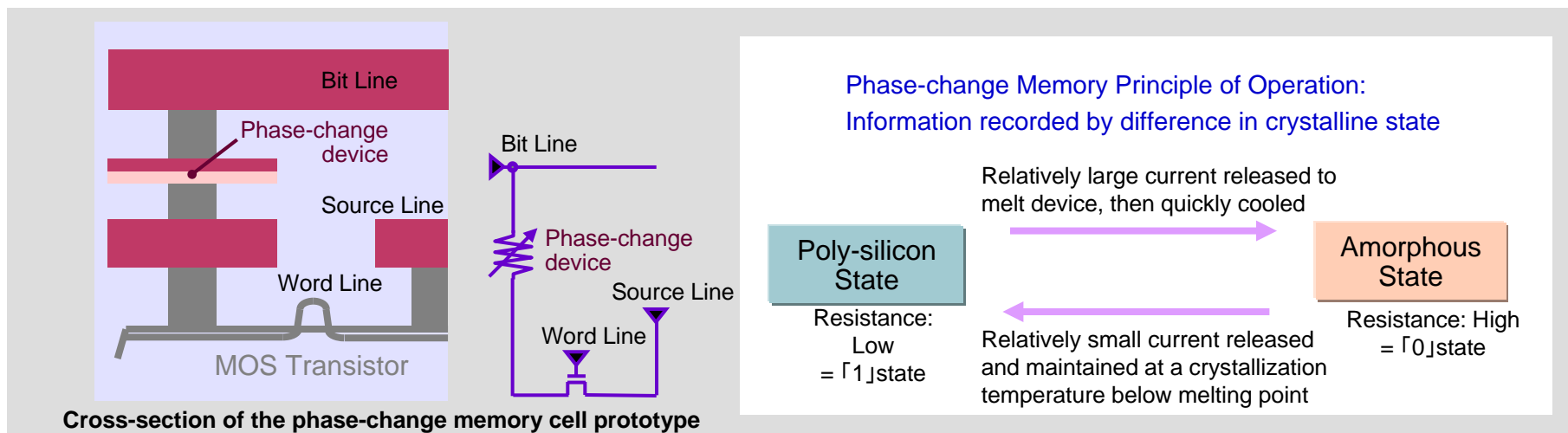


2005/10/6 Release

Development of 1.5 V Supply Voltage MOS Phase-change Memory Cell Prototype - For high-density low-cost embedded microprocessor memory -



Hitachi, Ltd. and Renesas Technology Corp. announced that they have developed a prototype phase-change memory cell using a MOS transistor, and confirmed memory operation with a supply voltage of 1.5V. This achievement, a phase-change memory cell which for the first time, can be operated with a transistor used in CMOS-LOGIC, is the fruit of original research on low-current low-voltage operable phase change material, and the development of circuit technology enabling accurate rewrite at a low voltage of 1.5V. This result can be said to have opened the way for the application of phase-change memory as embedded memory for next-generation embedded microcontrollers.