

# **An Edge Contact Type Cell for Phase Change RAM Featuring Very Low Power Consumption**

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In this paper, the Phase Change Random Access Memory (PRAM, also known as Ovonic Unified Memory – OUM) cell, which has an extremely small and reproducible contact area and improved thermal environment, was fabricated and electrically characterized. The memory cell successfully operates with 30ns pulses of 0.20 mA for RESET (high resistive) state and 0.13 mA for SET (low resistive) state. This is the best record of the published data.