Hyundai opts for FRAMs for airbags and sensors

HYUNDAI AUTONET of Korea has selected non-volatile FRAM technology for smart airbags and occupant sensors in its cars. FRAM's write endurance and fast data collection capability make it a suitable non-volatile memory technology for today's sophisticated airbag systems.

Today's smart airbags are designed to increase or decrease deployment force based on accident event parameters such as the severity of the crash, the weight of the occupant, and the interaction with other safety systems within the car. The parametric data that is sent to the car's electronic control unit (ECU) is generated by sensors throughout the interior.

In newer safety systems, sensors built into the seats send data to the ECU so the airbag can deploy intelligently.

As more and more sensors are added to cars, more data needs to be collected. FRAM allows automotive manufacturers to collect more data at higher frequencies enabling the car's systems to store and act on the timeliest information available.

Ramtron will be supplying the FRAM chips to Hyundai.

"Our design win success with Hyundai Autonet for smart airbags is evidence of FRAM's growing acceptance among top automotive system suppliers," said Ramtron CEO Bill Staunton. "FRAM possesses key features for smart airbag systems that competitive memory technologies cannot easily provide. We expect smart airbag usage to continue to grow as the technology makes its way into an increasing number of car models. Airbags are just one of many places in automobiles that can leverage FRAM benefits."

To date, Ramtron FRAM products have been designed into smart airbag systems for eight car manufacturers across Europe, the US and Asia. The company anticipates volume FRAM memory shipments into smart airbag systems to exceed two-million units by the end of 2006. Ramtron's 16kbit FM25C160 is a popular choice among airbag users due to its 5V operating power and SPI interface.

Hyundai is to use Ramtron FRAM chips for its car airbag systems.