

# FGD-04D

## Floating Gate Dosimeter (FGDOS®)



The power of small things

Target Specification. Confidential

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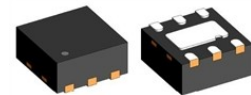
### FEATURES

- 8-bit Dose-to-Digital Converter
- I2C Interface (I2C Slave)
- Programmable dose range: 0-10Gy / 0-50Gy
- Temperature monitor integrated on-chip
- Analog Mode: dose voltage output
- Passive detection mode (zero power consumption)
- 2.5V to 5V supply voltage
- Low current consumption: 40uA at 2.5V
- Standby Mode

### APPLICATIONS

- Blood Irradiation
- CBRN Protection
- Active Medical Implants
- PCB Dosimetry

### PACKAGE



DFN6 2x2mm

## GENERAL DESCRIPTION

FGD-04D is a digital radiation sensor based in FGDOS® principle.

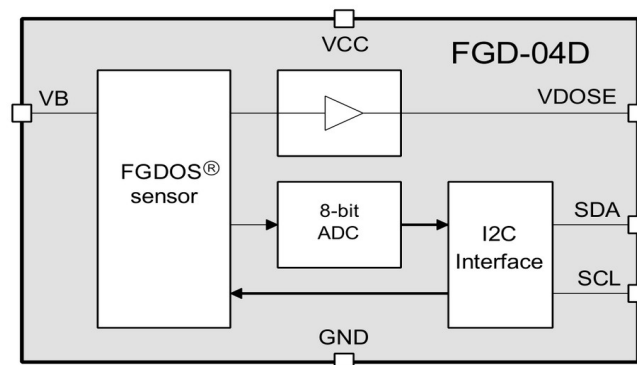
The IC senses and records the accumulated ionizing radiation dose, even when there is no power supply (zero-power sensor). The IC needs to be power-up only for dose reading, providing truly passive dosimetry with instant read-out capability.

FGD-04D is an I2C slave with 8-bit dose-to-digital converter. The accumulated dose can be

read in 8-bit format through standard I2C interface.

An Analog Mode is also supported, the IC is configured as simple analog sensor, and dose information is provided as an analog voltage.

The IC incorporates a temperate sensor for temperature dependency correction via post-processing.



BLOCK FUNCTIONAL DIAGRAM

