Full Memory Encryption (FME)

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Full Memory Encryption (FME) is a computer architecture whcih prevents data visibility in the event of its unauthorized access or theft. FME is commonly used to protect Data-in-Motion and Data-at-Rest and increasingly recognized as an optimal method for protecting Data-in-Use by encrypting data using Main Memory Encryption (MME).

FME for all computer memory (i.e., the stack, code and/or heap) to be encrypted individually or in total. FME has been imlemented different processors (i.e., AMD, Intel, etc) as well as mobile devices. The system provides both confidentiality and integrity protections of code and data which are encrypted everywhere outside the CPU boundary.

AMD has an imolementation of FME called Secure Memory Encryption (SME) and Intel has a version of FME called Total Memory Encryption (TME).

Source: https://en.wikipedia.org/wiki/Data_in_use