GE Aviation provides a range of Flight Management Computer (FMC) solutions to support multiple aircraft platforms.

GE Aviation provides a range of Flight Management Computers (FMCs) to support both civil and military applications. The family includes compact FMCs for air transport applications and Avionics Flight Management Computers (AFMCs) for more complex aircraft configurations. The FMCs and AFMCs support both single, dual, and triple aircraft configurations. The FMCs provide a range of interfaces to enable the Flight Management System (FMS) to interface with all required civil and military avionics sensors and sub-systems. The FMCs incorporate ARINC 429, MIL-STD-1553B, and Ethernet data buses.

The GE Aviation FMCs are on on various aircraft including the 737NG and 737 MAX aircraft, KC-46 Pegasus transport/tanker, P-8A Poseidon Multi-Mission Maritime aircraft, C-130J Super Hercules military transport, LM-100J commercial cargo, E-6 Mercury Airborne Command Post, and E-4B Nightwatch Airborne Operation Center.

The FMCs offer improved performance with highly reliable, low power circuitry, passive cooling, extensive built-in test, and fault storage capabilities.

The FMC hosts the Flight Management Function (FMF) software that, together with the Multipurpose Control Display Unit (MCDU), comprise the Flight Management System (FMS).

The FMS performs the following functions:

- Flight Plan Management & Construction
- Primary Multi-Sensor Navigation
- Performance Management
- Trajectory Computation
- Lateral & Vertical Guidance
- Flight Process Monitoring
- Datalink Messaging
- Management of Navigation Radios
- Military Flight Management functions such as refueling patterns, search & rescue, airdrop, rendezvous, etc.)
- Flight Deck Cautions/Warnings
- Sub-system control functions

Flight Management Computer (FMC)

Avionics Flight Management Computer (AFMC)

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The FMS incorporates Integrated Required Navigation Performance (RNP RNAV) and Global Positioning System (GPS) capabilities. The FMS incorporates advanced navigation performance and improved cockpit operations to take full advantage of the state-of-the-art terminal area procedures.

The FMS provides accurate flight profile predictions for primary and alternate destinations for various performance options. This includes a Required Time of Arrival (RTA) mode that controls the flight to arrive within seconds at any point in flight.

The FMS Navigation Database can include all departure, enroute, arrival and approach procedures to facilitate automated flight.

As new procedures for improved safety and airspace throughput become available, the FMS is ready to provide safe and efficient improvements to aircraft operations. The advanced FMS is available for retrofit into existing fleets enabling access to procedures, airports, and airspace requiring state-of-the-art technology.

Flight Management Computer Specifications

Version	Model 2907C	Model 2912A	Model 2975A
Part Number	176200-01-01	187185-001	186149-001
Characteristic	**FMC**	**AFMC**	**CNI-SP**
Processor Speed	40 MHz	800 MHz	800 MHz
Communication Processor CCA		X	X
IO Processor CCA		X	X
On-aircraft Software Loading	X	X	X
Cooling: Aircraft Forced Air	X	X	
DO-160 Environmental Standards	X	X	X
Developed to DO-254 & DO-178	X	X	X
Navigation (GPS)	X	X	X
Navigation (IRS)		X	X
Power: 115 VAC, 400 Hz	X	X	X
Size	4 MCDU	3/4 ATR Short	10.2" W x 8" H x 13" D
Weight (Maximum)	13 lbs.	24 lbs.	24 lbs.
Ethernet	3	2	2
MIL-STD-1553B		2	2
RS-422	2	4	
RS-422/485			4
ARINC 429 In	32	64	32
ARINC 429 Out	16	32	16
Discrete In	69	70	32
Discrete Out (Bi)	1 (5)	39	24
Memory: FLASH	32 MB	128 MB	128 MB
Memory: RAM	4 MB	512 MB	512 MB