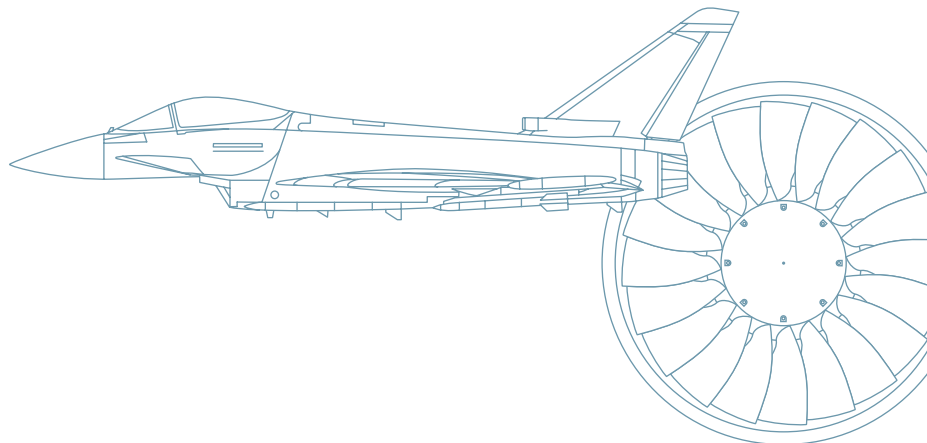




## EJ200 – Digital Engine Control and Monitoring Unit (DECMU)

The control solution



## EJ200 – Digital Engine Control and Monitoring Unit

MTU Aero Engines' **Digital Engine Control and Monitoring Unit (DECMU)** is the consequent further development of the EJ200 engine control unit—combining all engine control unit and monitoring functions in one single piece of equipment. It will be fitted to all Tranche 2 series production EJ200 engines from 2007 onwards.

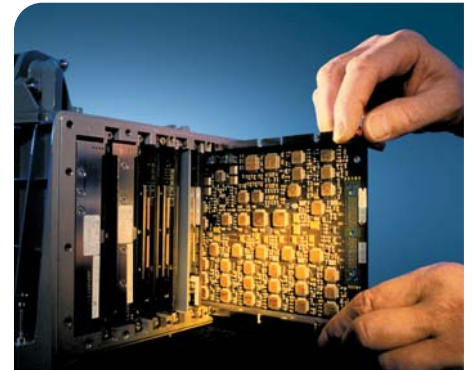
The DECMU integrates the current control unit, monitoring unit and vibration charge amplifiers into the existing control unit chassis.

Through its innovative electronic design the DECMU provides the hardware platform for possible functional enhancements of the EJ200.

Apart from the obvious benefits in terms of cost, mass and reliability, this product provides a proactive solution towards reducing the risks associated with electronic component obsolescence.

### **Fulfilling the same DECU design requirements, the DECMU provides the following system benefits:**

- Reduction in mass by four kilograms and in volume by five liters
- Increased computing power by 20 percent using advanced computer technology
- Improvement in reliability, maintainability and logistics by using less line replaceable units
- Simplification of aircraft interface (sole aircraft ► engine interface) and engine configuration (EMU is engine-mounted)
- Represents the ultimate solution for future control and monitoring systems for off-board life usage calculation and production solution for thrust vector control



### **Design features**

- Advanced electronic design, board design with thermal and vibration management
- Power dissipation < 100 W
- Mass < 13 kg
- MIL-Bus 1,553 links to aircraft
- EMC/lightning NEMP/nuclear hardening protection  
Engine mounted, operating temperature range -40 °C ► +125 °C
- Engine control with seven variable actuators ensuring carefree handling throughout the permissible flight envelope
- Probability of catastrophic failure < 10<sup>-9</sup>/h
- Mission abort rate < 10<sup>-6</sup>/h



MTU Aero Engines GmbH  
Dachauer Straße 665  
80995 Munich • Germany  
Tel. +49 89 1489-3669  
Fax +49 89 1489-6262  
www.mtu.de