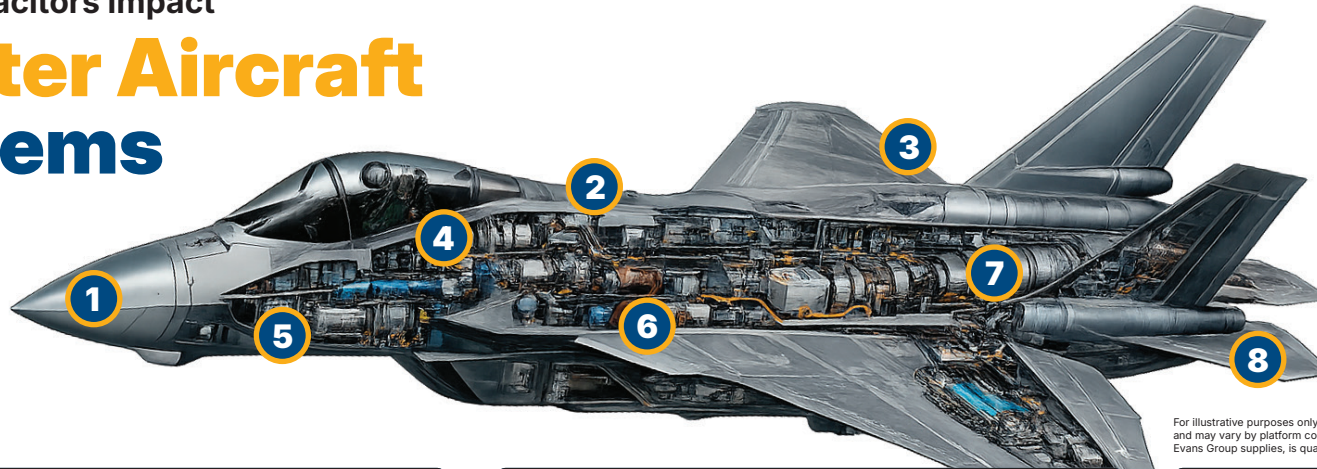


Where Capacitors Impact

Fighter Aircraft Systems



Evans GROUP
Power Integrity.
RF Performance.
Mission Ready.

Technology Key

Evans: Hybrid Wet Tantalum

Paktron: Multilayer Polymer Film (stacked)

UTC: High-reliability Ceramic

Eulex: RF & High-frequency Ceramic

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For illustrative purposes only. System configurations and applications vary. Subsystem locations shown are representative and may vary by platform configuration. Product placement identifies potential areas of applicability and does not imply that Evans Group supplies, is qualified on, or is installed on every platform or subsystem shown.

1. AESA Radar (T/R Module)



CAPACITOR FUNCTIONS

- RF matching & tuning
- T/R module decoupling
- High-Q bypass
- DC blocking
- Power supply filtering
- Pulsed energy storage

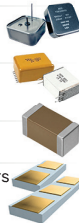
BEST FIT TECHNOLOGIES

Evans: Power-dense bulk energy storage and power-supply stabilization

Paktron: Low-ESR power-supply filtering and ripple suppression

UTC: Decoupling, bypass, and power-supply filtering

Eulex: High-Q RF capacitors for matching, coupling, and DC blocking



2. Electronic Warfare (EW)



CAPACITOR FUNCTIONS

- RF bypass & coupling
- Wideband filtering
- Limiter & detector filtering
- Power conditioning
- Transient suppression

BEST FIT TECHNOLOGIES

Evans: Bulk energy storage, power hold-up, and pulse support

Paktron: Low-ESR, high-dv/dt for power conditioning, pulse support, and snubbing

UTC: Bypass, filtering, and pulse-transient suppression

Eulex: RF bypass, coupling and high-frequency filtering



3. Communications & Datalinks



CAPACITOR FUNCTIONS

- RF filtering
- DC blocking
- Impedance matching
- Power rail decoupling
- Signal line integrity

BEST FIT TECHNOLOGIES

Paktron: Low-ESR for power-rail filtering and snubbing

UTC: Decoupling and signal-interface filtering

Eulex: RF filtering, impedance matching, DC blocking



4. Mission Computer & Avionics



CAPACITOR FUNCTIONS

- Power hold-up (MIL-STD-704)
- POL decoupling
- FPGA/CPU power rails
- High-frequency bypass
- Noise filtering
- Transient suppression

BEST FIT TECHNOLOGIES

Evans: Bulk energy storage and power hold-up

Paktron: Low-ESR for power-supply filtering and ripple suppression

UTC: Point-of-load decoupling, processor-rail filtering, and noise suppression



5. Laser Targeting Pod



CAPACITOR FUNCTIONS

- Power hold-up (MIL-STD-704)
- High power pulse energy
- Precision analog filtering
- Low-ESR decoupling
- High-reliability ceramics
- Transient suppression

BEST FIT TECHNOLOGIES

Evans: Pulse energy storage and minimize voltage droop

Paktron: Low-loss, low-ESR analog filtering, pulse support, and power conversion

UTC: Precision analog filtering and low-ESL decoupling



6. Power Distribution System



CAPACITOR FUNCTIONS

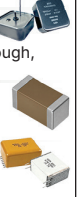
- Bulk energy storage
- DC bus filtering
- DC/DC conversion filtering
- Inrush current handling
- Ripple suppression

BEST FIT TECHNOLOGIES

Evans: High-capacitance, low-ESR bulk energy storage for DC-bus stability, ride-through, and ripple-current handling

UTC: DC-bus filtering, converter decoupling, and ripple-current handling

Paktron: Low-ESR, high-ripple for DC/DC output filtering, ripple suppression, and DC-bus stabilization



7. Propulsion & Engine Control (FADEC)



CAPACITOR FUNCTIONS

- Power conditioning
- Hold-up energy
- Control loop filtering
- High-temperature reliability

BEST FIT TECHNOLOGIES

Evans: Power hold-up and power-supply stabilization

UTC: High-temp, high-voltage for control-loop filtering and power conversion

Paktron: Power conditioning, power conversion



8. Flight Controls & Actuation



CAPACITOR FUNCTIONS

- High pulse current
- Energy storage
- Solenoid drive filtering
- Vibration & shock resilience

BEST FIT TECHNOLOGIES

Evans: Power-dense energy storage and high pulse power delivery

UTC: Decoupling and filtering under shock, vibration, and temperature extremes

Paktron: Snubbing, filtering, and pulse support for solenoid-drive circuits



THE EVANS GROUP ADVANTAGE



Extreme Environment
Performance from
-55°C to +250°C,
vibration and shock



High Reliability
Designed for long
life in mission-critical
systems



Proven Technologies
Flight-qualified and
trusted across
defense platforms



Global Support
Engineering,
manufacturing and
supply chain you
can rely on