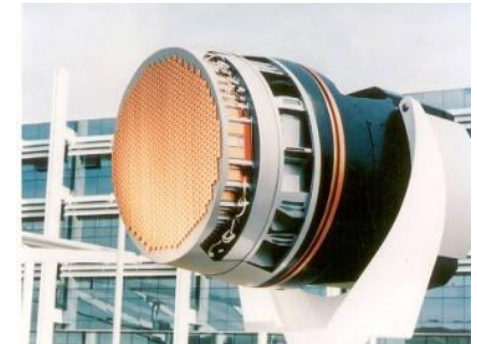
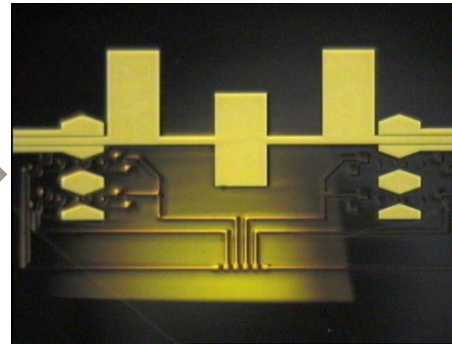
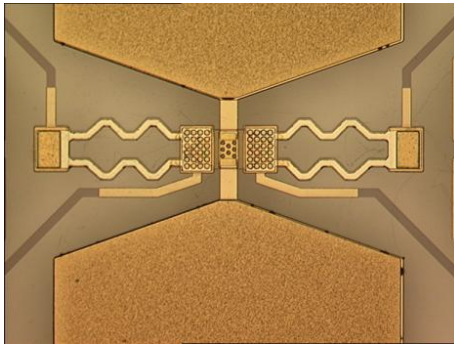


As part of a UK defence industry and Ministry of Defence collaboration, INEX developed RF MEMS technology for the fabrication of miniaturised, switchable, tunable, and reconfigurable microwave filters. The project monolithically integrated a low voltage MEMS switch and novel filter. It provides filters of reduced size, increased functional complexity and density, reducing systems level cost and offering multi-band operation with enhanced receiver dynamic range and protection.



**Substrate:** Quartz (150 mm, 500 $\mu$ m)

**Technology:** Microstrip, suspended bridge, capacitive actuation

**Scope:** Research & Development

**Integration:** Monolithic integration of switch & filter in microstrip technology

**Application:** Electronic warfare and wideband radar systems, compact lightweight multifunctional radar systems for unmanned aerial vehicles, mobile communications base-stations, etc.