

# Engineering Bulletin

Bulletin No: EB-05-003

23 May 2005

Subject: Parts Obsolescence, End of Life Buy

End of Life Component:

Part Number: BC20  
Description: Brushless Motor Driver  
Manufacturer: Apex Microtechnology

Affected Equipment:

Part Number: 8002785-10  
Description: Servo Amplifier Assembly  
Subsystem: SPN43 Stabilization Upgrade 8002773

BAE SYSTEMS (ESD) has been notified by the manufacturer of the subject components end of life and therefore is advising its customers to make an End of Life Buy decision.

To help in making this decision, Apex has provided a MTBF analysis which says that the BC20 part has an expected life of 25,000 hours. Assuming that the SPN43 radars operate 50% of the time the estimated time to failure for a single amplifier is approximately:  $(25,000 \text{ hours}) / (12 \text{ hours/day} \times 365 \text{ days/year}) = 6.2 \text{ years}$ . As of this bulletin date Apex has 126 pieces of the BC20 component in stock.

ESD has a replacement amplifier but it requires replacing the 8002789 circuit card, both current amplifiers and the heat sink base plate. The cost of this solution is currently being provided with the SPN35 production proposal. The only advantage to sparing additional Apex BC20 components is cost since the field repair time to replace this component is no less the time required to replace the circuit card and base plate. However; time does become a factor if the replacement CCA and base plate have not been fabricated and placed in inventory as spares.

Please contact our Customer Support representative for further information. Also to view this and other bulletins please visit our website at [www.esdradar.com](http://www.esdradar.com) and click on the Engineering Bulletins icon.

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