This circuit is proprietary to Linear Technology and supplied for use with Linear Technology parts. 

**Customer Notice:** Linear Technology has made a best effort to design a circuit that meets customer-supplied specifications; however, it remains the customer's responsibility to verify proper and reliable operation in the actual application. Component substitution and printed circuit board layout may significantly affect circuit performance or reliability. Contact Linear Applications Engineering for assistance.

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**REVISION HISTORY**

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**SCH, LT3685EMSE, 2A, 38V STEP-DOWN SWITCHING REGULATOR WITH SYNC FUNCTION**

---

**CONTRACT NO.**

**APPROVALS**

**DATE**

1630 McCarthy Blvd.
Milpitas, CA 95035

Phone: (408)432-1900
Fax: (408)434-0507

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**FILENNAME:** 1167A-1.DSN

**SHEET:** 1

**OF:** 1

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**C1 22uF 63V**

**C2 2.2uF 50V**

**C3 0.47uF 50V**

**C4 0.1uF 50V**

**R1 100K**

**C5 680pF**

**R2 60.4K 1%**

**C6 100pF**

**R3 20K**

**R4 110K**

**R5 590K**

**R6 100K**

**C7 22uF 10V**

**C8 0.1uF 50V**

**D1**

**E1 VIN**

**E2 GND**

**E3 EXTSS**

**U1 LT3685EMSE**

**E4 VOUT 5V@2A**

**E5 GND**

**E6 PGOOD**

**E7 SYNC**

---

**VIN 60V TRANSIENT**

**6.3V - 38V**

**GND**

**EXTSS**

---

**L1 10uH**

---

**JP1 1 2 3 4**

---

**D1**

---

**E4 VOUT 5V@2A**

---

**E5 GND**

---

**E6 PGOOD**

---

**E7 SYNC**

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