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Analog Control 1 - 12V to 12V Converter

Sheet Title: LM5170 12V to 12V Converter

Project Title: Designed for: Public Release

Assembly Variant: 001

Contact: http://www.ti.com/support

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Version control disabled

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Drawn By: Engineer: Jing Ji, Garrett Roecker

TID #: 004

Orderable: N/A

http://www.ti.com

Components:

- LM5170
- 2N7002E-T1-E3 (Q1, Q2)
- 0.1 µF (C1)
- 20.0 kΩ (R12, R11, R10, R9, R8, R7, R6, R5, R4, R3, R2, R1)
- CMDD4448 (D1, D2)
- 4.99 kΩ (R13, R14, R15)
- LM4040AIM3X-2.0 (U3)
- 100 V 1000 pF (C8)
- 0.1 µF (C120)
- 2.20 kΩ (R3)
- 7.50 kΩ (R4)
- 0.018 µF (C4)
- 330 pF (C2)
- 9.09 kΩ (R5)
- SN74LV00ADR (U2A, U2B)
- 50 V 0.01 µF (C7)
- 0.047 µF (C6)
- 200 kΩ (R8, R9)
- 10 V 10 pF (C3)
- 3900 pF (C5)
- 59.0 kΩ (R6)
- LM6142AIM/NOPB (U1A, U1B)
- 50 V 3900 pF (C5)
- 25 V 1000 pF (C8)

Legend:

- AGND
- +V5
- REF
- +V12_A
- +V12_B
- +V5
- V5
- DIR1
- EN1
- DIR2
- EN2
- +VCC1
- 3.3 V
- 5 V
- 12 V
- 18 V
- GND
- 0 V
- 4.99 V
- 5 V
- VIN
- GND
- 0 V
- 4.99 V
- 5 V
- 12 V
- 18 V
- 3.3 V
- AGND
- +VCC1
- 3.3 V
- 5 V
- 12 V
- 18 V
- GND
- 0 V
- 4.99 V
- 5 V
- 12 V
- 18 V
- 3.3 V
- AGND

Connections:

- A to B
- B to A
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