

Apex ATOM 600 based on mister Mile F100 mosfet audio amplifier

The circuit diagram illustrates the Apex ATOM 600 audio amplifier, which is based on the mister Mile F100 MOSFET audio amplifier. The schematic shows a multi-stage design, including an input stage, a pre-amplifier stage, and a power output stage. Key components include:

- Input Stage:** Utilizes a BC108 NPN transistor (Q1) and a BC107 NPN transistor (Q2) for signal input and initial amplification.
- Pre-amplifier Stage:** Employs a BC108 NPN transistor (Q3) and a BC107 NPN transistor (Q4) for further signal processing.
- Power Output Stage:** Uses a pair of MOSFETs, specifically IRFP240 (Q5, Q6), to drive the speaker.
- Power Supply:** A 12V DC supply is connected to the circuit, with a 1000µF electrolytic capacitor (C1) for filtering.
- Speaker:** A 15W 8Ω speaker is connected to the output of the MOSFET stage.
- Resistors:** Various resistors (R1-R40) are used for biasing, signal coupling, and load matching.
- Capacitors:** Capacitors (C1-C22) are used for coupling, bypassing, and filtering throughout the circuit.
- Diodes:** Diodes (D1-D11) are used for signal rectification and protection.

The diagram is labeled with component values and part numbers, and includes a title "Apex ATOM 600 based on mister Mile F100 mosfet audio amplifier".