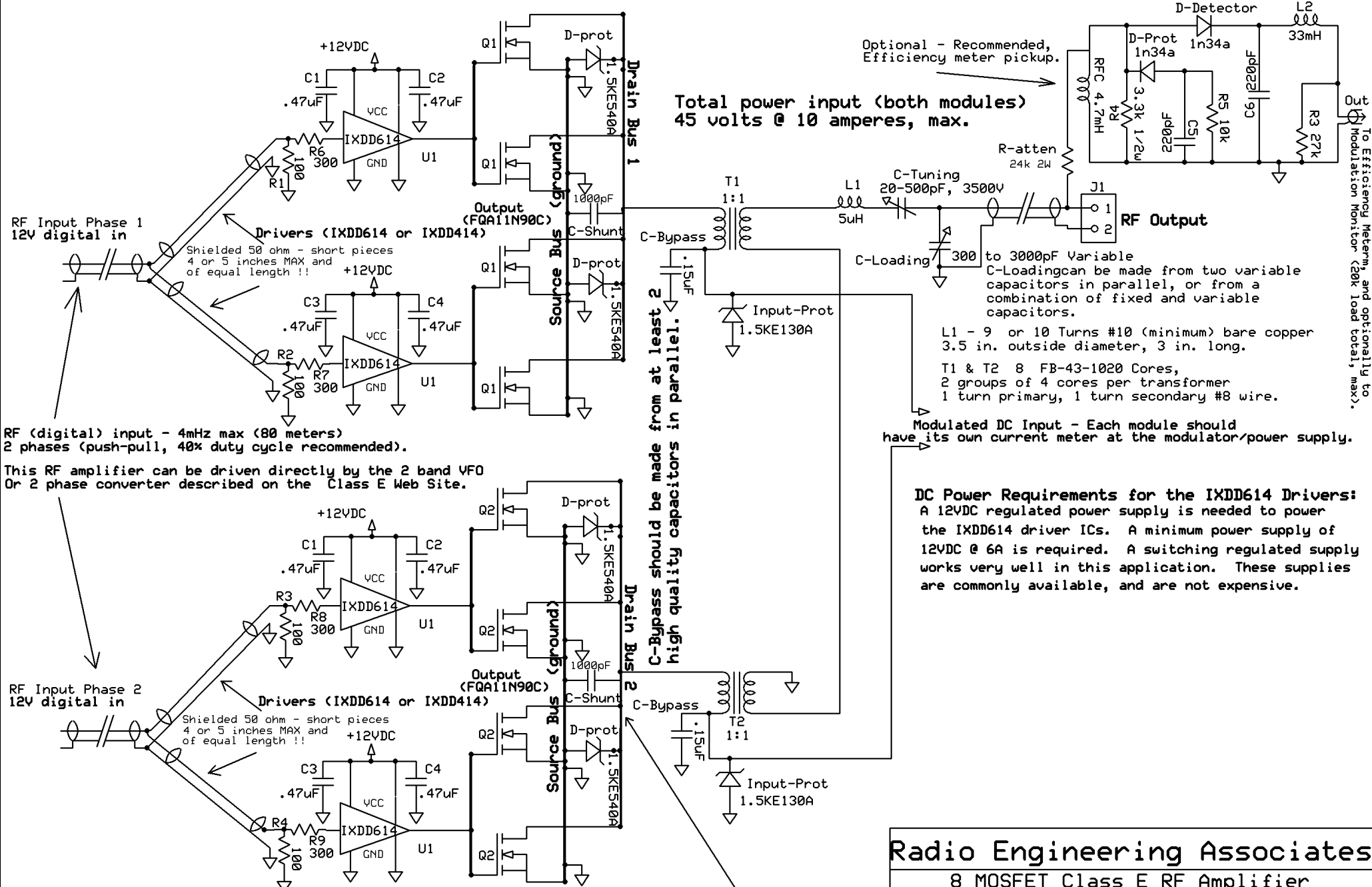


450 Watt DC input (max, at carrier) (400W. output typical) 2 module (push-pull), 8 MOSFET, 80 Meter Class E RF Amplifier (with driver)



Total power input (both modules)
45 volts @ 10 amperes, max.

Optional - Recommended,
Efficiency meter pickup.

RF Input Phase 1
12V digital in

Drivers (IXDD614 or IXDD414)

Shielded 50 ohm - short pieces
4 or 5 inches MAX and
of equal length !!

RF (digital) input - 4MHz max (80 meters)
2 phases (push-pull, 40% duty cycle recommended).

This RF amplifier can be driven directly by the 2 band VFO
Or 2 phase converter described on the Class E Web Site.

RF Input Phase 2
12V digital in

Drivers (IXDD614 or IXDD414)

Shielded 50 ohm - short pieces
4 or 5 inches MAX and
of equal length !!

C-Bypass should be made from at least 2
high quality capacitors in parallel.

L1 - 9 or 10 Turns #10 (minimum) bare copper
3.5 in. outside diameter, 3 in. long.

T1 & T2 8 FB-43-1020 Cores,
2 groups of 4 cores per transformer
1 turn primary, 1 turn secondary #8 wire.

Modulated DC Input - Each module should
have its own current meter at the modulator/power supply.

DC Power Requirements for the IXDD614 Drivers:
A 12VDC regulated power supply is needed to power
the IXDD614 driver ICs. A minimum power supply of
12VDC @ 6A is required. A switching regulated supply
works very well in this application. These supplies
are commonly available, and are not expensive.

C-Shunt (one for each module) - Use American Technical Ceramics
multilayer ceramic capacitors ATC100C series (with microstrip termination) recommended.
Good quality silver-mica or other high current, low ESR multilayer ceramic capacitors may also be used.

| | | |
|--|---------------------|-------------|
| Radio Engineering Associates | | |
| 8 MOSFET Class E RF Amplifier 45 volts @ 10 amperes, max. | | |
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