

Gianpietro Gozzi IK2VTU

Some measurements taken on board 623 and 622 of the:

"Skanti switched mode power supply 48 Volt" Model 107 600 20

mounted in the HF transceiver Skanti TRP8400 D IT1, serial number 9291.

The measurements were made with a constant resistive load of 1 Amp and a constant output voltage of 48 Vcc.

Equipment used:

Multimeter FLUKE model 110 "true RMS multimeter"

Agilent Oscilloscope model DSO-X 2012

BOARD 623 (with negative reference potential **-V** connected to pin no. 5 of the PL2 connector)

D43 - D44 (BYW31)

A 32.29 Vcc

K 48.00 Vcc

Q17 - Q18 (BUV20)

B -3.5 Vcc

E 0 Vcc

C 32.28 Vcc

Q15 – Q21 (BUV27)

B -3.5 Vcc

E -3.985 Vcc

C 32.28 Vcc

Q16 – Q22 (TIP42A)

B - 4 Vcc

E - 3.5 Vcc

C - 5.25 Vcc

Q24 – Q14 (BC636)

B - 4.4 Vcc

E - 4 Vcc

C - 5.26 Vcc

BOARD 622, with negative reference potential **-V** connected to pin no. 5 of the PL2 connector.

Q13 – Q23 (BD140)

B 32 Vcc

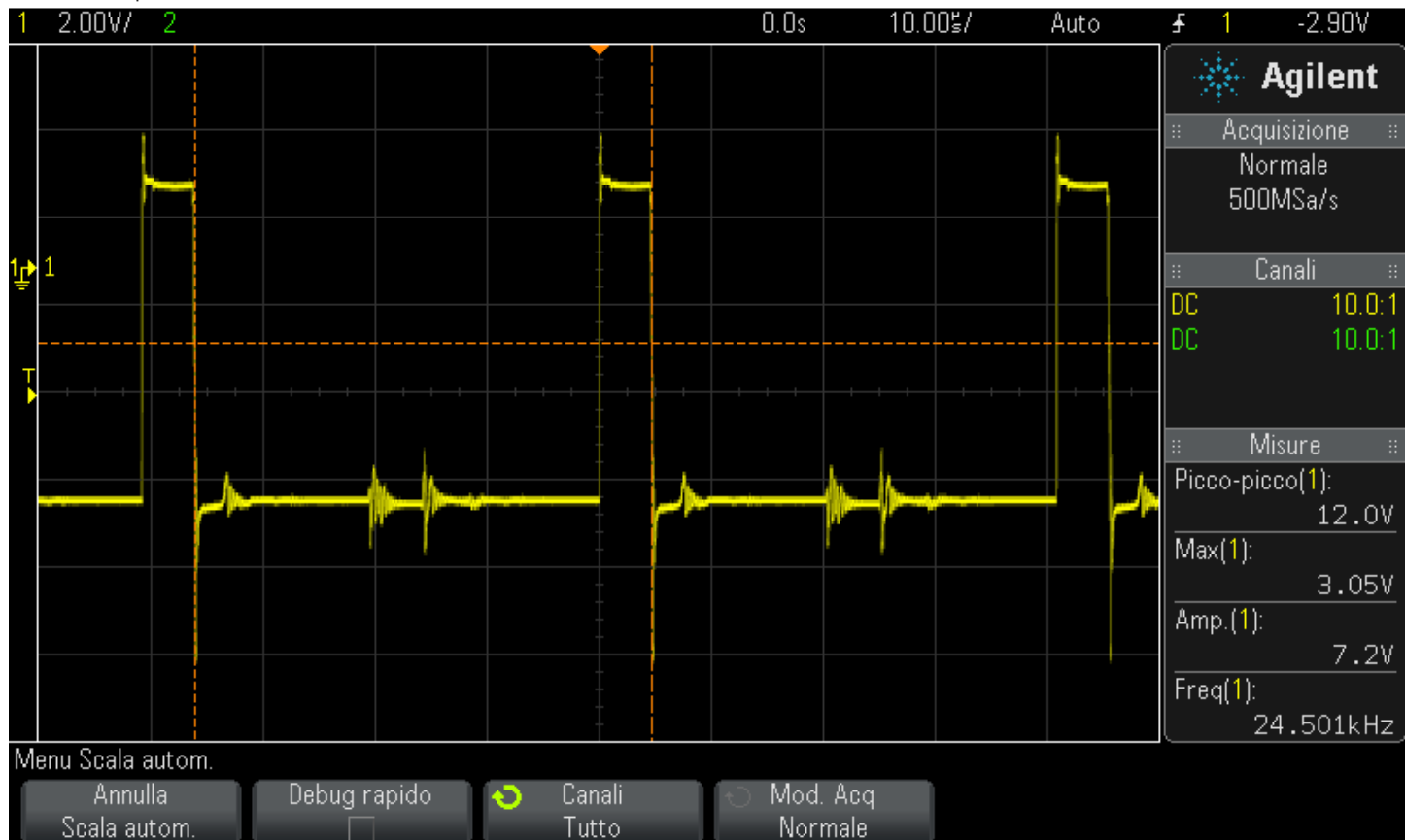
E 32 Vcc

C - 3.9 Vcc

Measure with oscilloscope on PL4 pin1 - PL4 pin2

Amplitude: 12 Vpp - Frequency: 24,500 kHz

DSO-X 2012A, MY51360917: Sat Dec 02 17:25:37 2017



Q11 – Q19 (BC639)

B 0.5 Vcc

E 0.37 Vcc

C 32 V cc

Q12 – 20 (2N2907A)

B 0.5 Vcc

E 0.37 Vcc

C 0 Vcc

Q7 (TIP42C)

B 30.9 V_{cc}

E 31.5 V_{cc}

C 10.5 V_{cc}

Q8 (BD140)

B 31.13 V_{cc}

E 31.72 V_{cc}

C 8.96 V_{cc}

IC2 (UL N2883 or CA3183E)

Pin 1 0.854 V_{cc}

Pin 2 0.891 V_{cc}

Pin 3 0.837

Pin 4 0.168 V_{cc}

Pin 5 0 V_{cc}

Pin 6 0.708 V_{cc}

Pin 7 0.708 V_{cc}

Pin 8 0 V_{cc}

Pin 9 0 V_{cc}

Pin 10 0.708 V_{cc}

Pin 11 0 V_{cc}

Pin 12 0 V_{cc}

Pin 13 0 V_{cc}

Pin 14 8.68 V_{cc}

Pin 15 0.29 V_{cc}

Pin 16 0.969 V_{cc}

IC5 (HEF4047B or CD4047B)

Pin 1 4.892 V_{cc}

Pin 2 4.053 V_{cc}

Pin 3 4.038 V_{cc}

Pin 4 8.97 V_{cc}

Pin 5 8.97 V_{cc}

Pin 6 8.97 V_{cc}

Pin 7 0 V_{cc}

Pin 8 0 V_{cc}

Pin 9 0 V_{cc}

Pin 10 4.483 V_{cc}

Pin 11 4.484 V_{cc}

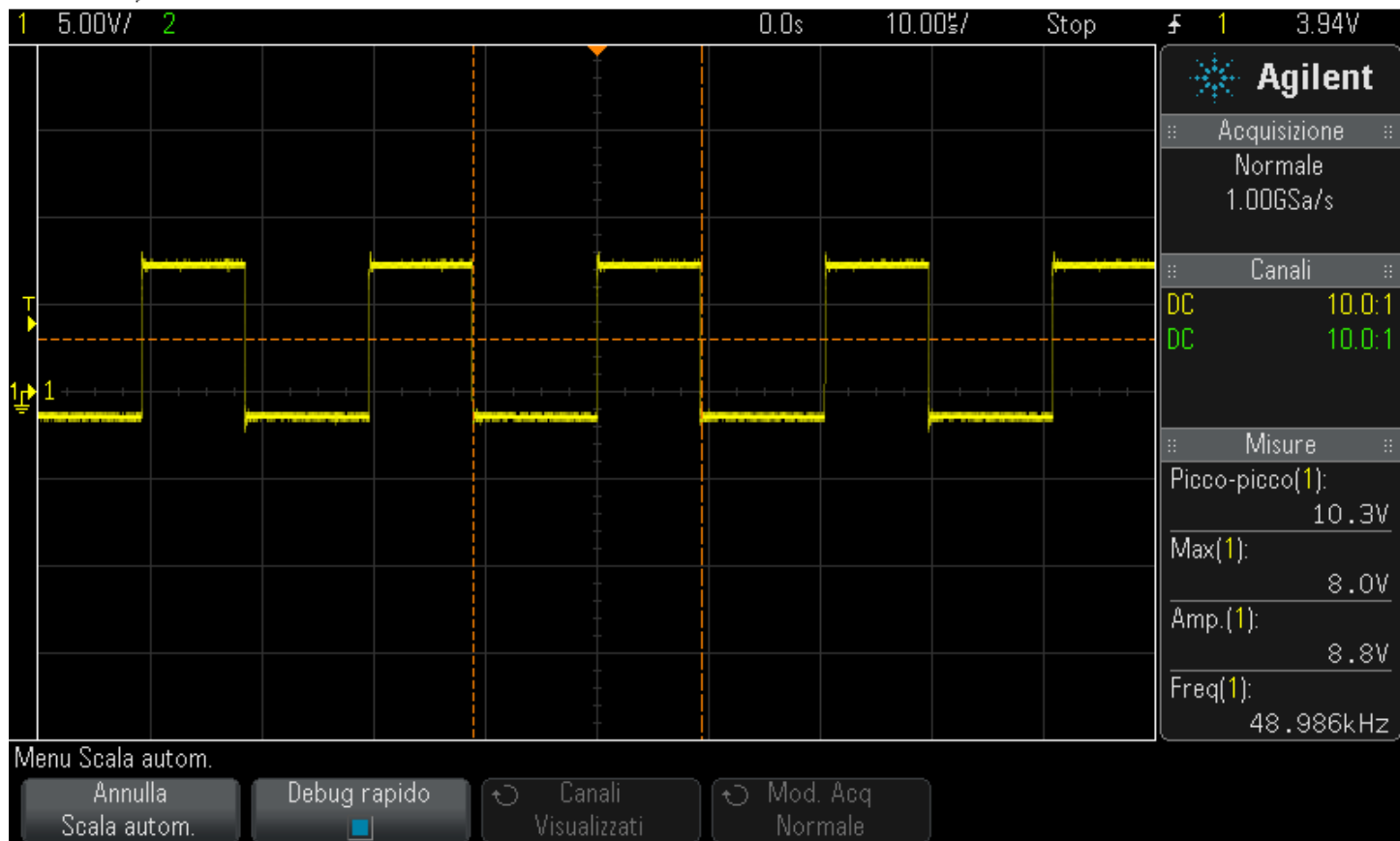
Pin 12 0 V_{cc}

Pin 13 4.91V_{cc}

Pin 14 8.97 V_{cc}

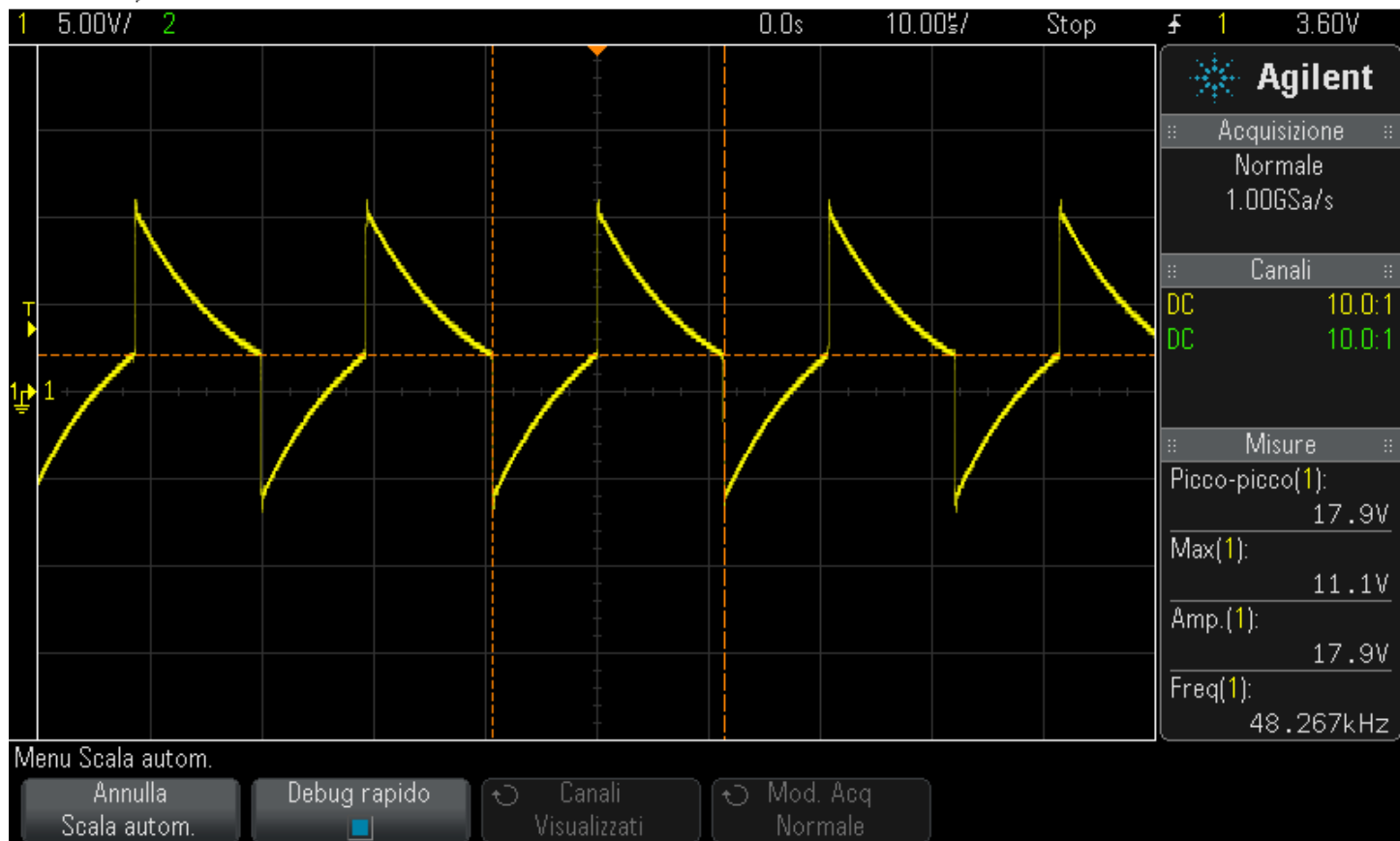
Measure with oscilloscope on pin1, pin2, pin 13 of IC5 (HEF4047B or CD4047B)
Amplitude 10.3 Vpp - Frequency 49.000 kHz

DSO-X 2012A, MY51360917: Sun Dec 03 17:14:01 2017



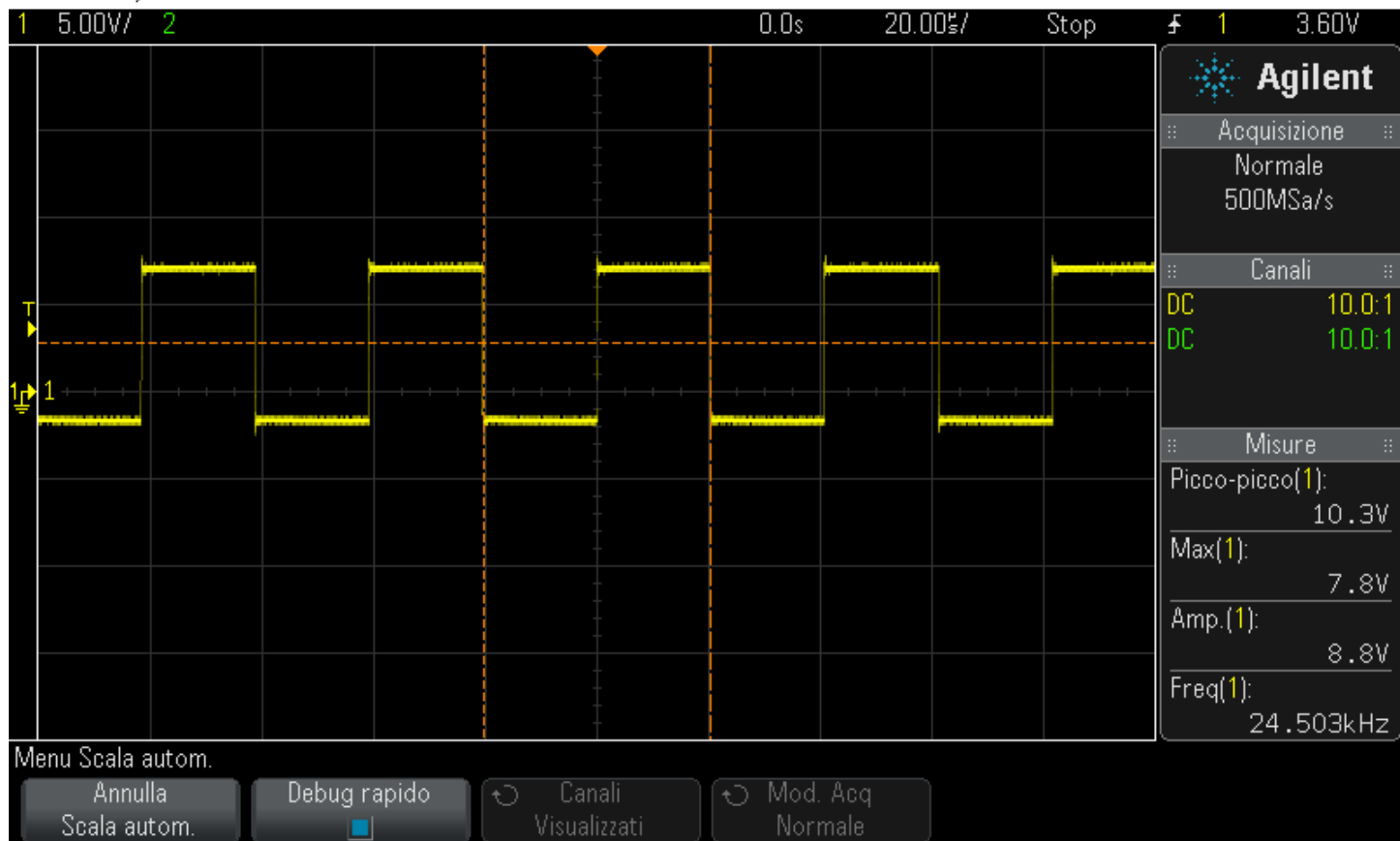
Measurement with oscilloscope on pin 3 of IC5 (HEF4047B or CD4047B)
Amplitude 17.9 Vpp - Frequency 48.267 kHz

DSO-X 2012A, MY51360917: Sun Dec 03 17:20:58 2017



Measure with oscilloscope on pin10, pin 11 of **IC5** (HEF4047B or CD4047B)
Amplitude 10.3 Vpp - Frequency 24.503 kHz

DSO-X 2012A, MY51360917: Sun Dec 03 17:23:54 2017



IC6 (LM2903N)

Pin 1 0.489 Vcc

Pin 2 4.474 Vcc

Pin 3 0.892 Vcc

Pin 4 0 Vcc

Pin 5 0.891 Vcc

Pin 6 4.474 Vcc

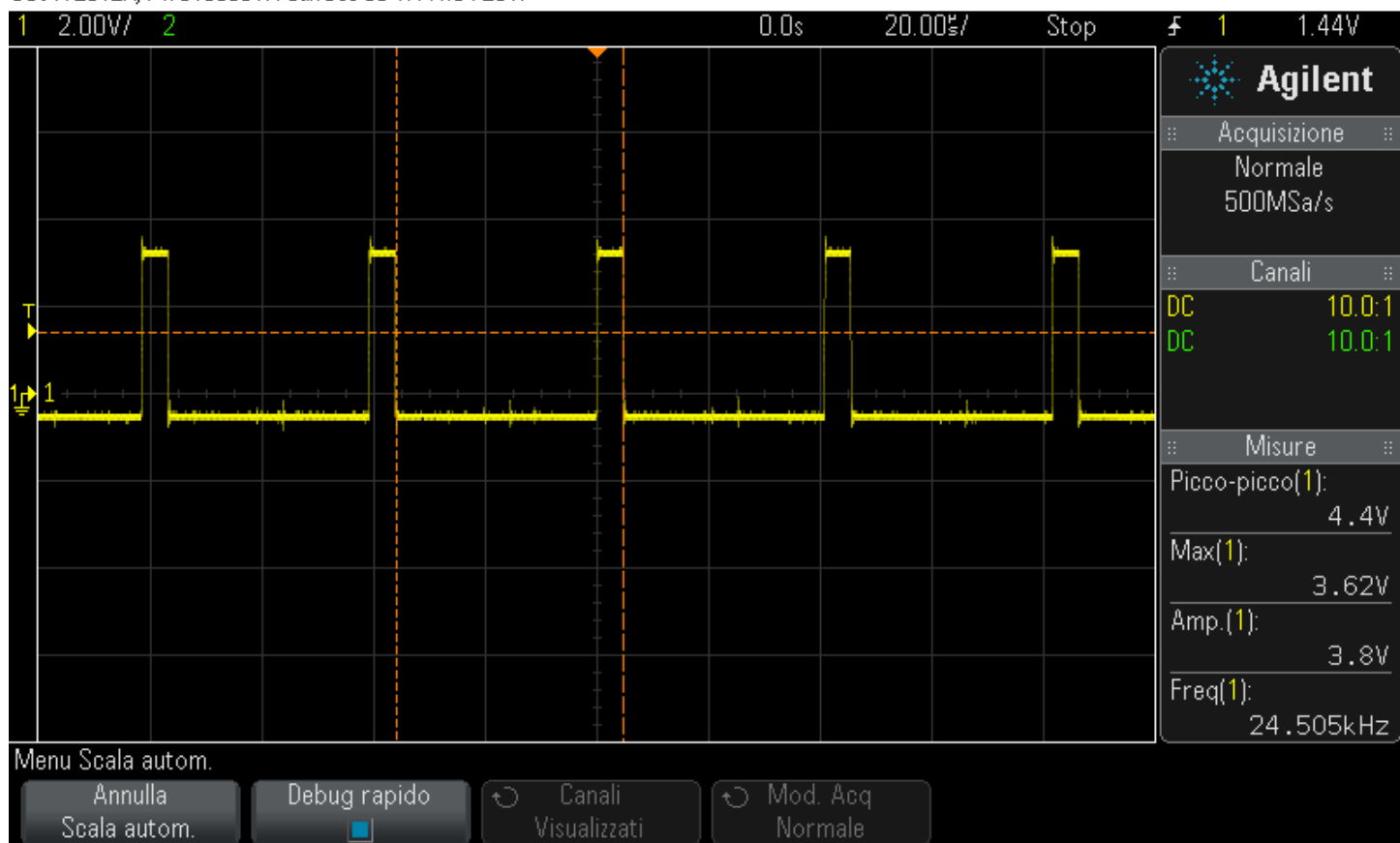
Pin 7 0.5 Vcc

Pin 8 8.96 Vcc

Measure with oscilloscope on pin1, pin7 of IC6 (LM2903N)

Amplitude 4.4 Vpp - Frequency 24.505 kHz

DSO-X 2012A, MY51360917: Sun Dec 03 17:41:54 2017



Measurement with oscilloscope on pin2, pin6 of **IC6** (LM2903N)
Amplitude 8.2 Vpp - Frequency 24.476 kHz

DSO-X 2012A, MY51360917: Sun Dec 03 17:45:39 2017

