



Macromate

http://www.macromate.com.tw

宇泰國際股份有限公司

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Macromate Corp.

8F, Universal Center, No.179, Sec.1,
Ta-Tung Road, Hsi-Chih, Taipei Hsien, Taiwan, R.O.C.

Federal Communication Commission
Authorization & Evaluation Division
7435 Oakland Mills Road
Columbia, Maryland 21046

FCC ID: LZU-MAP-811E and FCC ID: LZU-MAP-811

AUTHORIZATION AGREEMENT

To whom it may concern

I, an officer of Macromate Corp. appoint Training Research Co., Ltd. to act as the authorized representative in the preparation of applications for registration of equipment under Part 15 of Rules and Regulations of the Federal Communications Commission. I certify that the information provided to Training research Co., Ltd. properly describes the device or system for which equipment authorization is requested.

APPLICANT ANTI-DRUG ABUSE CERTIFICATION

The applicant certifies that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits, that includes FCC benefits, pursuant to section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853 (a), or, in the case of a non-individual applicant (e.g. corporation, partnership or other unincorporated association) no party to the application is subject to a denial of federal benefits, that includes FCC benefits, pursuant to that section. For the definition of a "party" for these purposes see 47 CFR 1.2002(b).

This Authorization, dated this 23rd day of March, 2001. Expires until to grant a application.

By

Signature

PM Manager

Printed/Title

Applicant: Macromate Corp.

(Must agree with section I on FCC Form 731 – Applicant's Full Business Name)

HILTRON

160 NETWORK ANALYZER

Page

MODEL: 50803000031
DEVICE ID 002

DATE: 03/09 2001
OPERATOR: ARVIN

SWEEP DATA
START: 2.2000 GHz
STOP: 2.7000 GHz
STEP: 0.0030 GHz

GATE START: -
GATE STOP: -
GATE: -
WINDOW: -

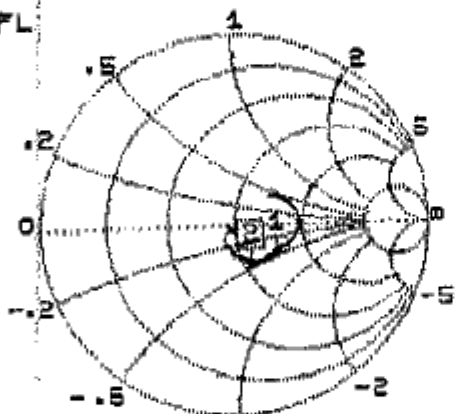
ERROR CORR: REFL ONLY
AVERAGING: 1 PTS
IF BNDWTH: REDUCED

PARAMETER:
NORMALIZATION:
REFERENCE PLANE:
SMOOTHING:
DELAY APERTURE:

CH2
S11
OFF
0.0000 mm
0.0 PERCENT

CH4
S11
OFF
0.0000 mm
0.0 PERCENT

S11 FWD REFL
IMPEDANCE



2.2000 - 2.7000 GHz

CH 4 = S11
REF. PLANE
0.0000 mm

MARKER 2
2.5000 GHz
1.556 U

MARKER TO MAX
MARKER TO MIN

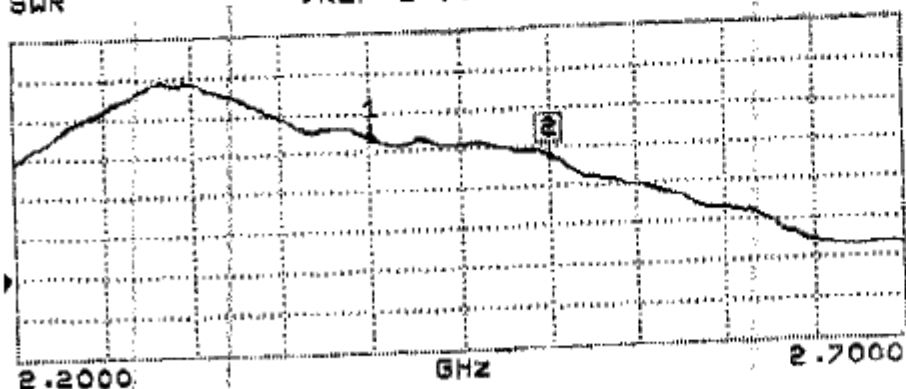
1 2.4010 GHz
1.672 U

S11 FORWARD REFLECTION

SWR

REF=1.000U

200.000mU/DIU



HILTRON

160 NETWORK ANALYZER

Page

MODEL: 50803000021
DEVICE ID: 003

DATE: 03/09 2001
OPERATOR: ARVIN

SWEEP DATA
START: 2.2000 GHz
STOP: 2.7000 GHz
STEP: 0.0030 GHz

GATE START: -
GATE STOP: -
GATE: -
WINDOW: -

ERROR CORR: REFL ONLY
AVERAGING: 1 PTS
IF BNDWTH: REDUCED

PARAMETER:
NORMALIZATION:
REFERENCE PLANE:
SMOOTHING:
DELAY APERTURE:

-----CH2-----
S11
OFF
0.0000 mm
0.0 PERCENT

-----CH4-----
S11
OFF
0.0000 mm
0.0 PERCENT

MARKERS:

| MKR # | FREQ GHz | RESISTANCE OHMS | REACTANCE OHMS | SWR UNITS | PHASE Deg |
|-------|----------|-----------------|----------------|-----------|-----------|
| 1 | 2.4010 | 45.563E+00 | 14.819E+00 | 1.381E+00 | 97.855 |
| 2 | 2.5000 | 55.913E+00 | 7.673E+00 | 1.201E+00 | 48.237 |

FREQUENCY POINTS:

| PNT # | FREQ GHz | RESISTANCE OHMS | REACTANCE OHMS | SWR UNITS | PHASE Deg |
|-------|----------|-----------------|----------------|-----------|-----------|
| 1 | 2.2000 | 41.662E+00 | 2.129E+00 | 1.207E+00 | 164.347 |
| 2 | 2.2240 | 39.554E+00 | 2.295E+00 | 1.271E+00 | 166.144 |
| 3 | 2.2480 | 38.010E+00 | 4.136E+00 | 1.336E+00 | 158.277 |
| 4 | 2.2720 | 36.583E+00 | 6.176E+00 | 1.410E+00 | 151.201 |
| 5 | 2.2960 | 37.257E+00 | 8.812E+00 | 1.429E+00 | 139.568 |
| 6 | 2.3200 | 38.644E+00 | 12.586E+00 | 1.467E+00 | 123.976 |
| 7 | 2.3440 | 42.078E+00 | 13.677E+00 | 1.409E+00 | 111.632 |
| 8 | 2.3680 | 43.124E+00 | 11.703E+00 | 1.338E+00 | 113.274 |
| 9 | 2.3920 | 44.094E+00 | 14.728E+00 | 1.400E+00 | 102.955 |
| 10 | 2.4160 | 46.868E+00 | 14.672E+00 | 1.362E+00 | 93.438 |
| 11 | 2.4400 | 50.373E+00 | 13.826E+00 | 1.316E+00 | 80.611 |
| 12 | 2.4640 | 52.344E+00 | 14.037E+00 | 1.320E+00 | 72.709 |
| 13 | 2.4880 | 55.937E+00 | 10.182E+00 | 1.249E+00 | 54.262 |
| 14 | 2.5120 | 54.654E+00 | 5.532E+00 | 1.148E+00 | 46.897 |
| 15 | 2.5360 | 51.611E+00 | 5.880E+00 | 1.127E+00 | 71.365 |
| 16 | 2.5600 | 52.825E+00 | 6.515E+00 | 1.148E+00 | 62.934 |
| 17 | 2.5840 | 55.030E+00 | 6.587E+00 | 1.171E+00 | 49.048 |
| 18 | 2.6080 | 55.677E+00 | 1.928E+00 | 1.120E+00 | 17.714 |
| 19 | 2.6320 | 52.686E+00 | -1.995E+00 | 1.067E+00 | -35.487 |
| 20 | 2.6560 | 48.083E+00 | -2.358E+00 | 1.064E+00 | -127.738 |
| 21 | 2.6800 | 46.786E+00 | 438.588E-03 | 1.069E+00 | 171.969 |
| 22 | 2.7000 | 47.195E+00 | 488.982E-03 | 1.060E+00 | 169.824 |