

FREQUENTLY ASKED QUESTIONS

ETERNITY PE/GE/ME/LE

What
When
Which
Where
How
Who
Why



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Version: V1R1

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How to have noise free Speech on T1E1 line?

Scenario Description:

T1E1 Port of ETERNITY is connected either with the PRI Line coming from Service Provider or with the T1E1 Port of any other System (PBX).

Observation:

When making a call or answering a call on the T1E1 Trunk of ETERNITY, noise is detected when a user is speaking.

Troubleshooting Steps:

Step1: Change the Slot of T1E1 Card and check.

Step2: Replace the cable connected with T1E1 Port and check the speech now. If the noise is still observed in the calls over T1E1 Port then move to Step 3.

Step3: Set Clock Synchronization under System Parameters

Set Clock Synchronization Frequency 2.048 MHz in case of E1 and 1.54 MHz in case of T1.

Check whether the Service Provider or the System connected with T1E1 Port of ETERNITY provides clock to ETERNITY or derives clock from ETERNITY.

If the Service Provider or the System connected with T1E1 Port provides clock to ETERNITY then configure the connected T1E1 Port in the “Clock Source Priority – 1”.

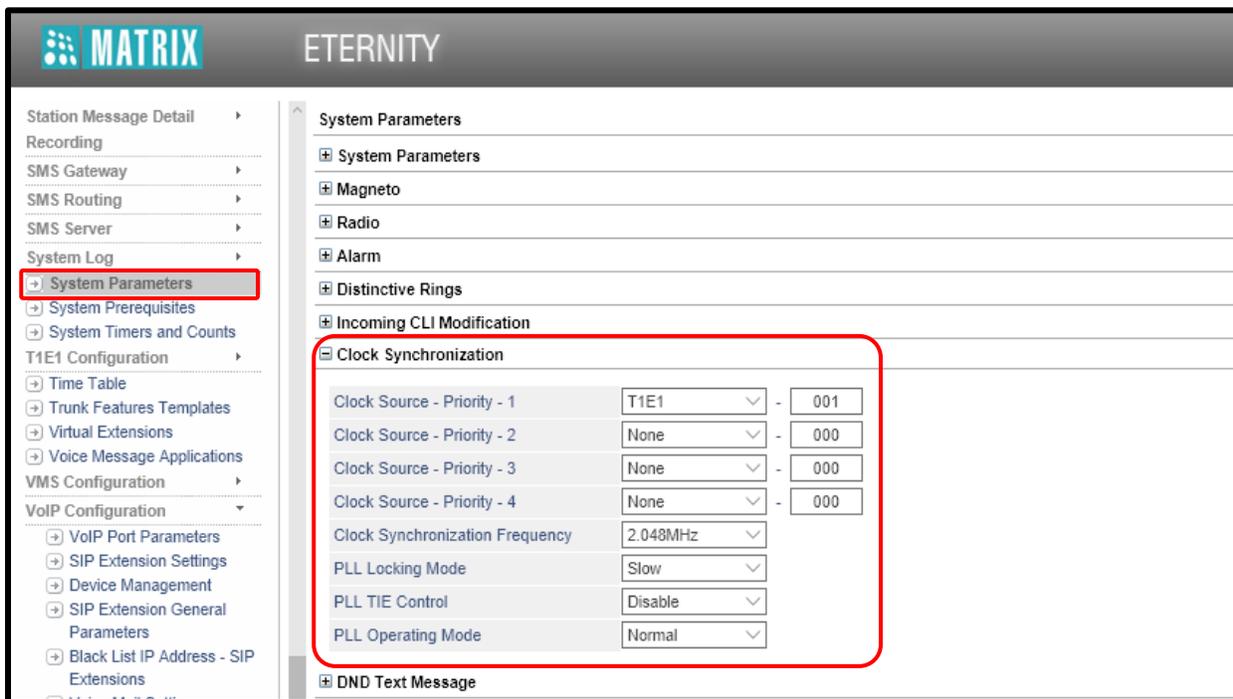
If the T1E1 Port is configured as T1, then configure the Clock Synchronization Frequency as 1.54 MHz and if the T1E1 Port is configured as E1, then configure the Clock Synchronization Frequency as 2.048 MHz.

 ...When the Clock Synchronization Frequency is changed, the System will

restart. In case of multiple Service Providers or if multiple System lines (from other PBX) are connected with ETERNITY, it is recommended to perform Clock Synchronization with only one of them.

If the Service Provider or the System connected with T1E1 Port is not providing clock to ETERNITY then configure “None” in Clock Source Priority – 1 to Clock Source Priority – 4.

Check the speech now. If the noise is still observed in the calls over T1E1 Port then move to Step 4.



Step4: Check the status of T1E1 Port under **T1E1 Configuration** → **Status**

- Click on **Clear Alarm/Counter**
- Refresh the page and check all the Counts
- If any count varies then set **None** in **Clock Synchronization** and check again

1 2 3 4 5 6 7 8

T1E1 Status

T1E1 Port - Name

ISDN Layer	Status
Layer-1	UP
Layer-2	UP

Alarms	Counter	Status
Loss Of Signal (LOS)	1	Absent
Remote Alarm Indication (RAI)	0	Absent
Alarm Indication Signal (AIS)	0	Absent

Performance Monitoring Counter	Counter
CRC-4 Error Count	14
FAS/NFAS Bit/Pattern Error Count	65
Far End Block Error Count	18
Line Code Violation Count	24418
Positive Slip Count	0
Negative Slip Count	84
Elastic Phase Count	46

Clear Alarm/Counter

Call Budget	Status
Budget Type	None

Submit

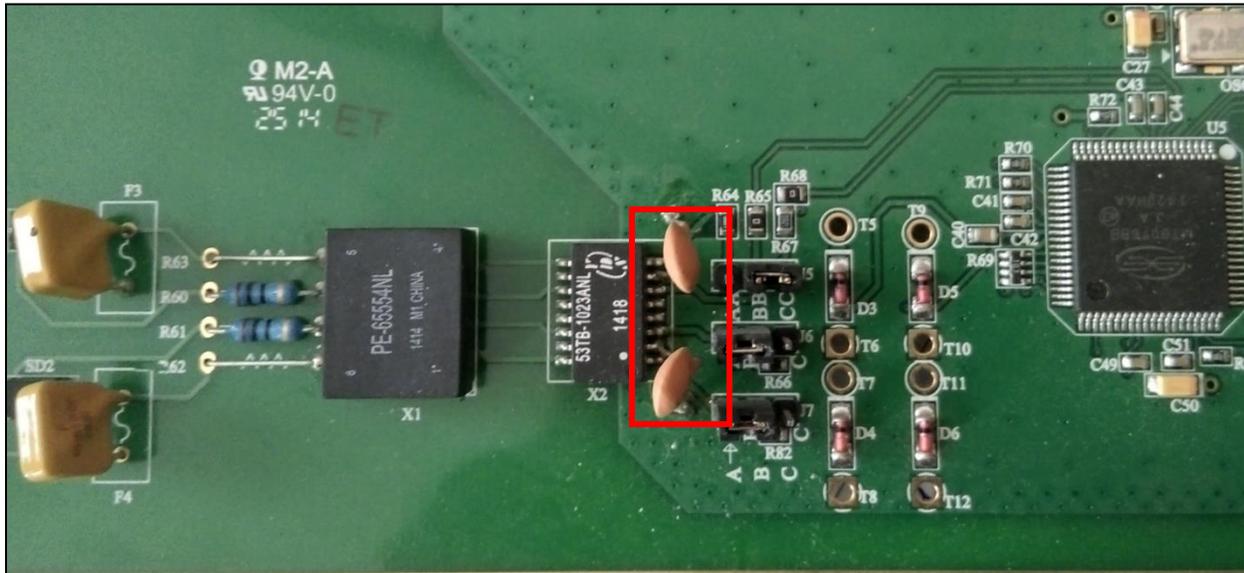
Step5: Check the PCB Version of T1E1 Card.

- ETERNITY PE V1R1
- ETERNTIY GE V1R3
- ETERNITY ME V2R1

If the PCB version of T1E1 Card is same or lower than the mentioned Version-Revision then move to Step 6.

Step5: Check for the two capacitors at the primary side of Transformer X2 on the T1E1 Card. Check for the two ceramic capacitors of 100 nF each, at the primary side of the Transformer X2 of T1E1 Port on the T1E1 Card (Refer to the image

below).



If the two ceramic capacitors of 100 nF are present at the primary side of Transformer X2 of the T1E1 Port on the T1E1 Card then refer to Step 6. If no capacitors are present at the primary side of Transformer X2 of the T1E1 Port on the T1E1 Card then, perform either of the below mentioned actions:

If it is feasible, solder two ceramic capacitors of 100 nF at the primary side of Transformer X2. Solder one capacitor between Pin no. 2 of Transformer X2 and Ground, and second capacitor between pin no. 7 of Transformer X2 and Ground (Refer to the image given above).

If it is not feasible, get the T1E1 Card for repairing to Matrix RMA and ask RMA team to solder Capacitor at the primary side of the Transformer X2.

~~✍~~ ...In case of T1E1 Dual Card, there will be two transformers, viz., Transformer X2 and Transformer X4. So, for T1E1 Dual Card, four capacitors will be required, two capacitors for Transformer X2 and two capacitors for Transformer X4.

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