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RELIABILITY PREDICTION REPORT

Equipment under Test:	GNSS&GSM TERMINAL, FMB630
Product:	FMB630
Manufacturer:	Teltonika
Report No.:	TLTK-20171208FMFT-15
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Documented By:

Engineer

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1. PURPOSE

Reliability prediction methodology provides the basis for reliability evaluation and analysis. The purpose of the prediction is to predict the life time of the product in units of failure rate and MTBF.

2. RELIABILITY PREDICTION

2.1. Analysis Database

Polimore MTBF Calculator

2.2. Analysis Method

The prediction method used:Telcordia SR-332, Issue 2, Parts Count
Failure rate (**λ**) = 10^6 hours(FITs)
MTBF = 1/λ

$$\lambda_{SSi} = \lambda_{Gi}\pi_{Qi}\pi_{Si}\pi_{Ti}$$

Where

$\lambda_{Gi} = Generic\ steady - state\ failure\ rate\ for\ device\ i$

$\pi_{Qi} = Quality\ factor\ for\ device\ i$

$\pi_{Si} = Stress\ factor\ for\ device\ i$

$\pi_{Ti} = Temperature\ factor\ for\ device\ i$

2.3. Calculation Parameters

Environment: Ground Mobile, Uncontrolled

Operation Stress: 50%(Voltage, Current, Power)

Method: Method I, Case 3

3. RESULTS

ITEM	Failure Rate (FIT)	Predicted MTBF (Hours)
Teltonika FMB630	36.586426896	27332.5406398

Note: library components of a near equivalent or similar technology and function were substituted when the parts could not be exactly found in the library.

4. REVISION HISTORY

Rev#	Date	Description
1.0	2017-12-08	First release