**BONAFIDE CERTIFICATE**

Certified that this project report **“CHANNEL DECODING (PORTING) FOR DRM RECEIVER”** is the bonafide work of “**M.SHARON PREETHI”** who carried out the project work under my supervision.

**SIGNATURE SIGNATURE**

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Submitted for the Full Semester Viva Voce held on ……………………….

**Internal Examiner External Examiner**

**ABSTRACT**

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**LIST OF ABBREVIATIONS**

AFS - Alternative Frequency Switching

AM - Amplitude Modulation

CRC - Cyclic Redundancy Check

DRM - Digital Radio Mondiale

EEP - Equal Error Protection

FAC - Fast Access Channel

FM - Frequency Modulation

HF - High Frequency

HMmix - mixed Hierarchical Mapping

HMsym - symmetrical Hierarchical Mapping

LF - Low Frequency

MF - Medium Frequency

MSb - Most Significant bit

MSC - Main Service Channel

OFDM - Orthogonal Frequency Division Multiplexing

OIRT - Organisation Internationale de Radiodiffusion et de Télévision

Pan - Panorama

PRBS - Pseudo-Random Binary Sequence

QAM - Quadrature Amplitude Modulation

rfa - reserved for future addition

rfu - reserved for future use

SDC - Service Description Channel

SM - Standard Mapping

SPP - Standard Protected Part

UEP - Unequal Error Protection

VSPP - Very Strongly Protected Part

**LIST OF SYMBOLS**

*fR -* reference frequency of the emitted signal

*K -* number of active carriers in the OFDM symbol

*K*max *-* carrier index of the upper active carrier in the OFDM signal

*K*min *-* carrier index of the lower active carrier in the OFDM signal

*LMUX -* number of input bits per multiplex frame for the multilevel encoding

*NMUX  -* number of MSC cells (QAM symbols) per multiplex frame

*T -* elementary time period, equal to 831/3 μs (1/12 kHz)

*Tf  -* duration of the transmission frame

*Tg -* duration of the guard interval

*Ts  -* duration of an OFDM symbol

*Tsf  -* duration of the transmission super-frame built from the set of

Transmission frames

*Tu -* duration of the useful (orthogonal) part of an OFDM symbol, excluding the guard interval

*X\* -* complex conjugate of value X

*-* round towards plus infinity

*-* round towards minus infinity