

# **REQUIREMENT SPECIFICATION**

## **HDTV Satellite Receiver**

### **X1**

#### 1.1. Specification

##### 1.1.1. Hardware Specification

## FRONT SPEC

Basic system configuration	Comments
LED	1 x LED (Dual Color Red/Blue)
IR	1 x IR
KEY	1 x Button

## REAR SPEC

Basic system configuration	Comments
Satellite Tuner INPUT	1 x RF Connector
SMART CARD	1 x Connector
SPDIF	1 x Connector (Optical)
ETHERNET+USB	1 x Connector
USB	1 x Connector
HDMI + ESATA	1 x Connector
Power Switch	1 x Switch [ on/off ]
DC JACK	1 x Connector
External IR	1 x PJ324 JACK

## Processor & HDTV Decoder

Processor	Comments
BCM7362	2K DIMIPS 750MHz CPU 128KB L2 Cache, 4K RAC Integrated DVB-S/S2 TUNER / Demod 324 Mpixel/s 2D GPU AVC/MP2/VC-1 1080p30 Decode 1080p60 Display Advanced Security Core Serial/Parallel NOR & NAND I/F's Dual USB SATA II I/F HDMI Output 19x19 PBGA

## RAM

Memory	Comments
DDR MEMORY	1EA x 512Mbyte DDR3
Key component	HYNIX H5TQ4G63CFR-RDC or equivalent
Package	78-FBGA

## Flash

Size	Comments
NAND FLASH	1 x 256MByte SLC
Key component	SPANSION S34ML02G100TFI000 or equivalent
Package	48pin TSOP

## RF Front End

Elements	Comments
System	DVB-S/S2 , QPSK & 8-PSK
Input frequency range	950 ~ 2150MHz
Input signal level	-25 ~ - 65dBm
Input Symbol rate	QPSK : 1~45Msps 8PSK : 10~30Msps
RF Input connector	F-Type, IEC 169-24 Female
LNB Power	Vertical 13V / Horizontal 18V, Current Max500mA
22KHz Tone	Frequency:22±2KHz, Amplitude:0.6±0.2v
DiSEqC	Version 1.0 & 1.2 Compatible, USALS
FEC Decoder	QPSK : 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK : 3/5, 2/3, 3/4, 5/6, 8/9, 9/10

## Power Supply

Type	Comments
ADAPTOR	12V/2A , Wall Mount Type

AC Characteristic	Parameter	Comments
Power	Output : Max.24W	GO298E-120-200
Input Voltage	90 ~ 264Vac	
Input Frequency	47 ~ 63Hz	

## E-SATA

Element	Comments
Component	Built-in inside BCM7362
Function	SATAII

## ■ HDMI Interface

Element	Comments
Connector type	TYPE A
Driver	Built-in inside BCM7362
Function	HDMI 1.4a
Package	19Pin

## ■ Digital Audio Output

Element	Comments
Connector type	Optical
SPDIF Output	IEC60958/61937

## ■ USB

Element	Comments
Component	Built-in inside BCM7362
Function	High Speed 2.0
Package	Type A

## ■ ETHERNET

Element	Comments
Component	Built-in inside BCM7362
Function	10/100Mbps
Package	RJ45 w/2LED

## ■ Remote Control Unit

Element	Comments
Type	Single mode RCU
Frequency	38KHz
Code	NEC
Key	TBD

## ■ Mechanical

Element	Comments
W x D x H (mm)	190 x140 x 41
Weight	TBD
Color	Black
AC On/Off Switch	1-pole(2-pin) at rear side.

## ■ Accessory

Element	Comments
User Manual	
12V / 3A Adaptor	
RCU	
Battery	2 x AAA type

