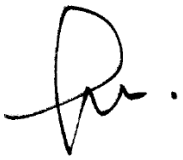
제 품 승 인 원

(APPROVAL SHEET)

승인구분 : □checked ■ approval		
승인일자 : 2019 년 02 월 07 일		
Approved by:		
담 당	검 토	승 인
		

Manufacturer	Kornix Technology Inc
Model	KGM 1544 S4
Item	외장형 GPS 모듈
Customer Model	
Supplied Agent.	Kornix Technology Inc

비고	

신청회사명 : Kornix Technology Inc
주소 : Room 110, 175, LS-ro, Gunpo-si, Gyeonggi-do, Korea, (ZIP)15808
TEL : 82-31-360-2038
FAX : 82-31-360-2039
URL : http://www.kornixtech.com

Kornix Technology
GPS Module
Hardware Specification

Product No. : KGM1544S4R01

(Revision 1.0)

Revision	Date	Description	Author
0.1	Sep., 2011	Preliminary	Don R. Oh
1.0	Dec., 2011	Original Approval	Don R. Oh

Preliminary

KORNIX Technology

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   3.1 Pin Description
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Preliminary

KORNIX Technology

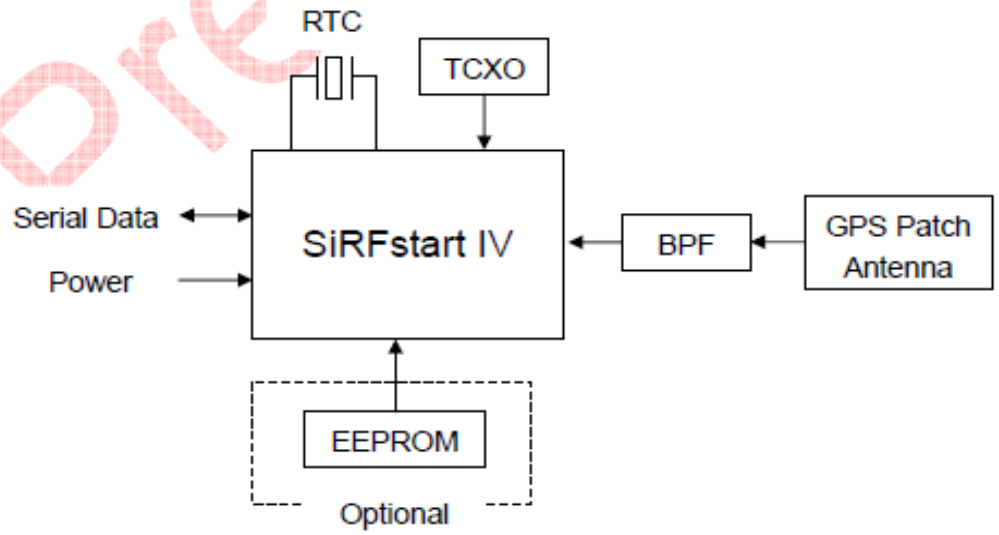
1. Introduction

KGM41544S4 is an antenna integrated GPS module using SiRF GPS solution and RF technology of Kornix, it gives you the excellent GPS sensitivity and good performance. The module has SiRF Star IV in it, fine designed and fine tuned circuits stabilize the hardware operation of the module.
The module has a patch antenna, there is no needs extra GPS active antenna module, it can reduce the material cost and easy to handle.
Data interface to the external device is TTL logic compatible serial signal, it directly connected to GPIO of MCU or logic circuitry.

1.1 Product Features

- High performance solution
  - High sensitivity navigation engine (PVT) tracks as low as -163dBm
  - 48 track verification channels
- Active jammer Removes
  - Removes in-band jammers up to 80dB-Hz
  - Tracks up to eight jammers
- 25mm X 25mm patch antenna on the module

1.2 Block Diagram



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KORNIX Technology

2 Technical Specification

2.1 GPS Specification

2.1.1 Sensitivity

- Autonomous acquisition -148 dBm
- GSM / UMTS coarse time aided -158 dBm
- CDMA precise time aided -160 dBm
- Tracking -163 dBm
- Navigation -160 dBm

2.1.2 Time to First Fix

- Hot start - Autonomous < 1 s
- Warm start - Autonomous < 35 s
- Cold start - Autonomous < 35 s
- MS Based - GSM coarse time < 4.7 s
- MS Assisted - GSM coarse time < 4.7 s

2.1.3 Velocity Accuracy

- Speed < 0.01 m/s
- Heading < 0.01°

2.1.4 Horizontal Position Accuracy

- Autonomous < 2.5 m

2.1.5 Receiver Specification

- Tracking L1, CA Code
- Channels up to 48
- Max. update rate 1 Hz
- Max. altitude/velocity <60,000 ft/<1,000 knots
- Protocol support NMEA, OSP

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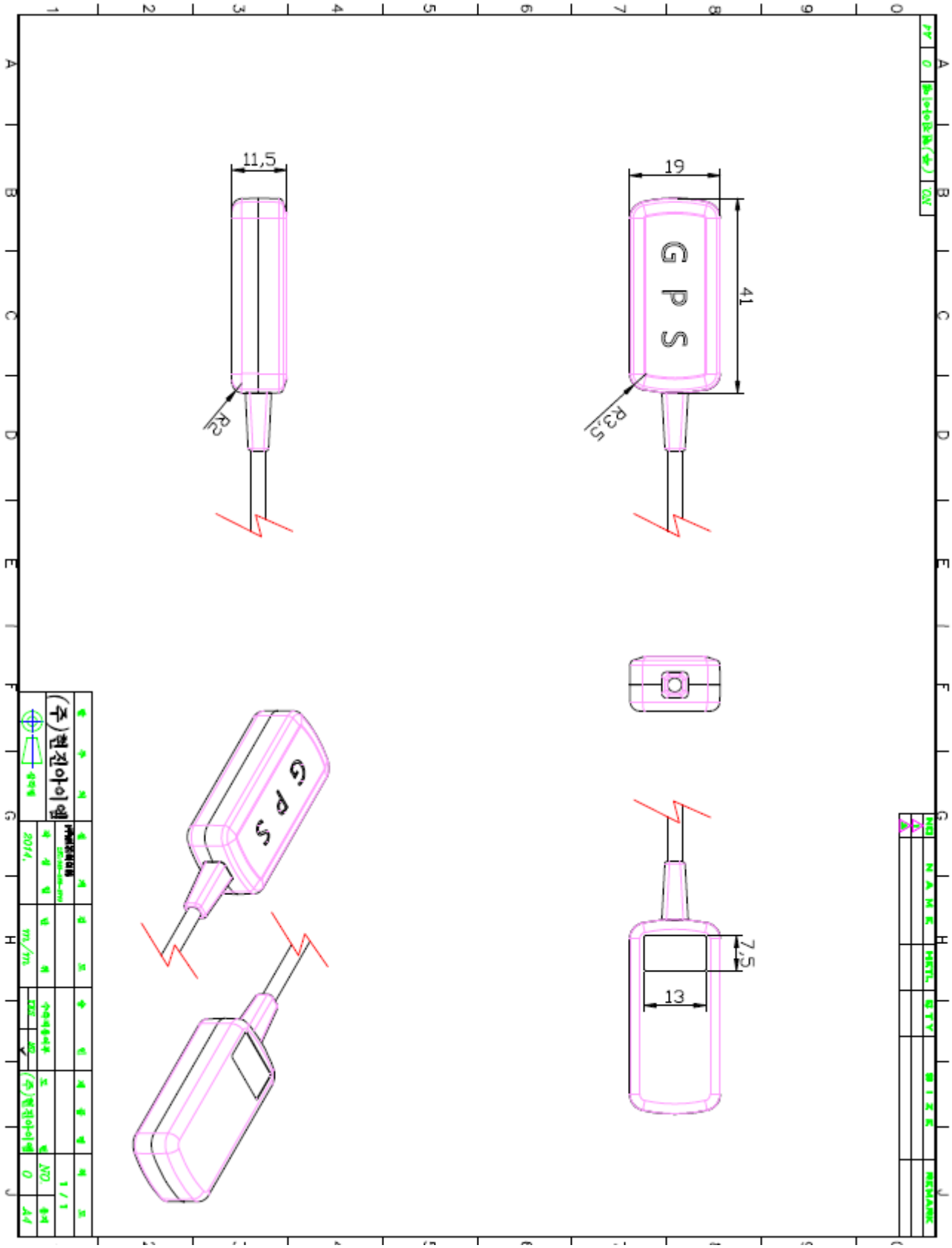
2.2 Electrical Specification

2.2.1 Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Power Supply Voltage	V_{CC}	6.0	V
RTC Power Supply	V_{RTC}	6.0	V
Logic Output High Level	V_{OL}	3.5	V
Logic Output Low Level	V_{OH}	V_{SS} - 0.3	V
Logic Input Low Level	V_{IL}	V_{SS} - 0.3	V
Logic Input High Level	V_{IH}	3.6	V
RF Input Power	RFIN	-50	dBm
Storage Temperature		-40 ~ +85	℃

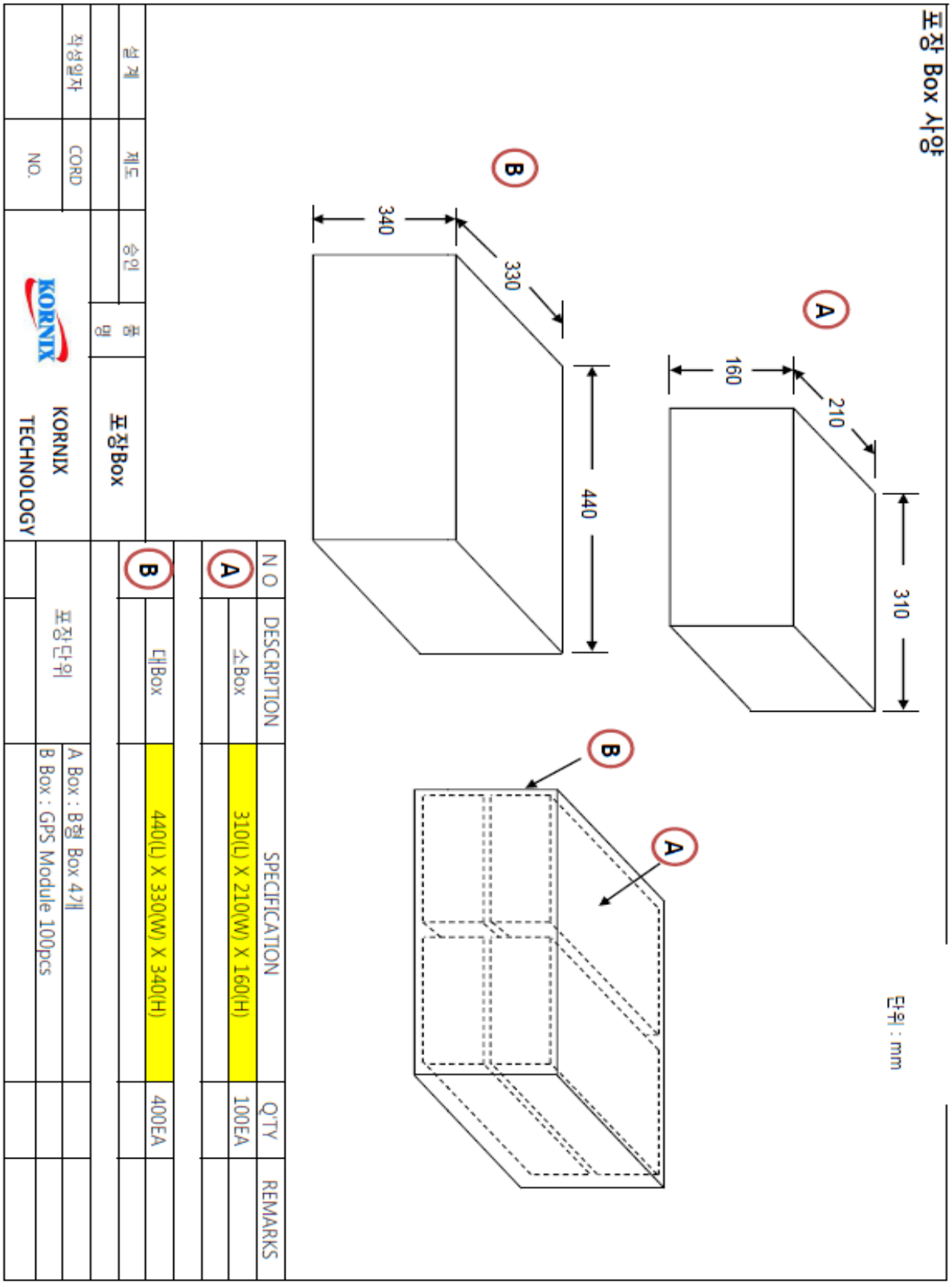
Preliminary

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11,5
R2
19
41
G P S
R3,5
G P S
7,5
13

N O	DESCRIPTION	SPECIFICATION	QTY	REMARKS
A	STEREO JACK	STEREO 4극 2.5Φ_right angle type	1EA	
B	HOUSING	12505HS-04P	1EA	YEONHO
	TERMINAL	12501TS	3EA	YEONHO
①	CABLE	UL 2725#28 4P 3Φ	1M	
②	TUBE	3.5Φ TUBE	1EA	
③	비닐폴리팩	200mm x 90mm(분리배출)별도납품	1EA	

설계		승인	품명	라이크비
작성일자	CORD	제도		
2015년 5월 19일	NO.	Kornix Technology		


표장 Box 사양
A
210
160
310
B
330
340
440
단위 : mm
B
A
N O
DESCRIPTION
SPECIFICATION
Q'TY
REMARKS
A
소Box
310(L) X 210(W) X 160(H)
100EA
B
대Box
440(L) X 330(W) X 340(H)
400EA
표장단위
A Box : B형 Box 4개
B Box : GPS Module 100pcs
KORNIX TECHNOLOGY
품명
표장Box
설계
제도
승인
작성일자
CORD
NO.