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## VCM-Series Product Data Sheet

Model Name: **VCM-CF360 Digital Voice Module**..... Rev. E2

### Introduction

**VCM-CF360** is a digital voice module .It directly plays back 8/16-bits mono PCM sound files digitized at 8, 11, 16, 22.05, 24, 32, 44.1 KHz. Sound files are programmed and stored in Compact Flash Card for instant, random access. There is no restriction on the length of each sound, as long as the total length of all sounds combined fit to the CF Card.

The board is designed to be a standalone device, powered by a single voltage supply. Sound playback can be triggered by a number of devices such as push buttons, motion sensors and dry contact closures. The built-in power amplifier can deliver up to 3.5W into a speaker, with a volume control tuner.

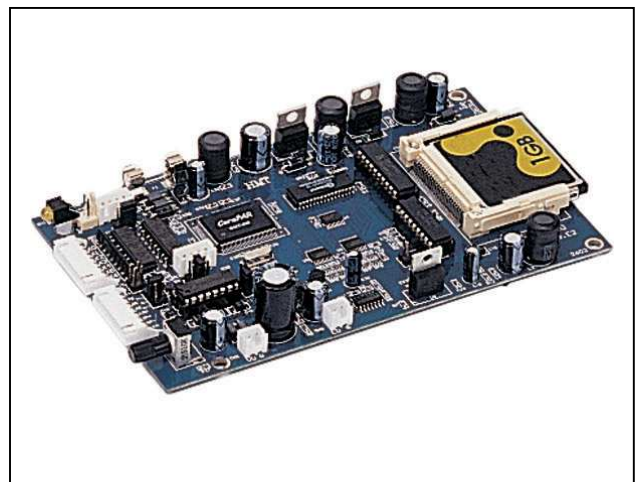
The board can be configured to operate in different modes. The configuration data is stored in CF Card memory along with sound bytes. On power up the board will configure itself automatically. There is no need to set switches manually.

There are many Playback Modes: Direct Single, Direct Single of Cycle, Binary, Parallel and Serial modes. All of input modes are edit via CF-Linker Software Tool.

### Feature

- \*Max. Quantity of Messages:
  - 8 Messages in Direct Single Mode
  - 255 Messages in Binary/Serial Mode
  - 7424 in Serial ASCII Mode
- \*Memory Type: **Compact Flash Card**
- \*Max. Memory Capacity: Up to 2GB.
- \*Voice Length:
  - 23 Seconds at 44.1KHz/8BITS (Per 1MB)
  - 5888 Seconds at 44.1KHz/8BITS(256MB)
- \* Voltage Supply: 12~36 VDC, 0.8A
- \*Output Amplifier: 3.5W (Ro = 4 ohm)

### Product Photo



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Model Name: **VCM-CF360 Digital Voice Module**..... Rev. E2

### Function / Specification

Input trigger pins number	8 pins, Photo coupler isolated.	
Input trigger acknowledge	Active Low trigger	
Exterior response signal	Busy signal and EOVS signal (End of voice)	
Memory type	Compact Flash Card	
Memory capacity	Max: 2GB	
Sampling rate support	8KHz/ 11KHz/ 16KHz/ 22KHz/ 24KHz/ 32 KHz/ 44.1KHz	
Message length	23 seconds / Per MB (Use Format: 44.1KHz / 8 bits)	
Max. quantity of message	8192 messages	
Max. address quantity of digital voice files	8192 files	
Properties for every message	Edge / Level , Hold / Unhold , Interrupt / Non-interrupt (All of trigger pins can be set individually.)	
<b>Trigger Mode Support / Trigger Pins Description / Max. Quantity of Message</b>		
Direct Single mode	X0-X7	8 messages
Single Circulating mode	X0-X7	8 messages
Binary code mode with strobe signal	X0-X6, Strobe: X7	127 messages
BCD code mode with strobe signal	X0-X6, Strobe: X7	80 messages
BCD code mode without strobe signal	X0-X7	99 messages
Parallel of binary code mode without strobe signal	X0-X7	254 messages
Binary Serial code mode	Rx	255 messages
Binary Serial frame mode	Rx	255 messages
ASCII Serial code mode	Rx	7424 messages

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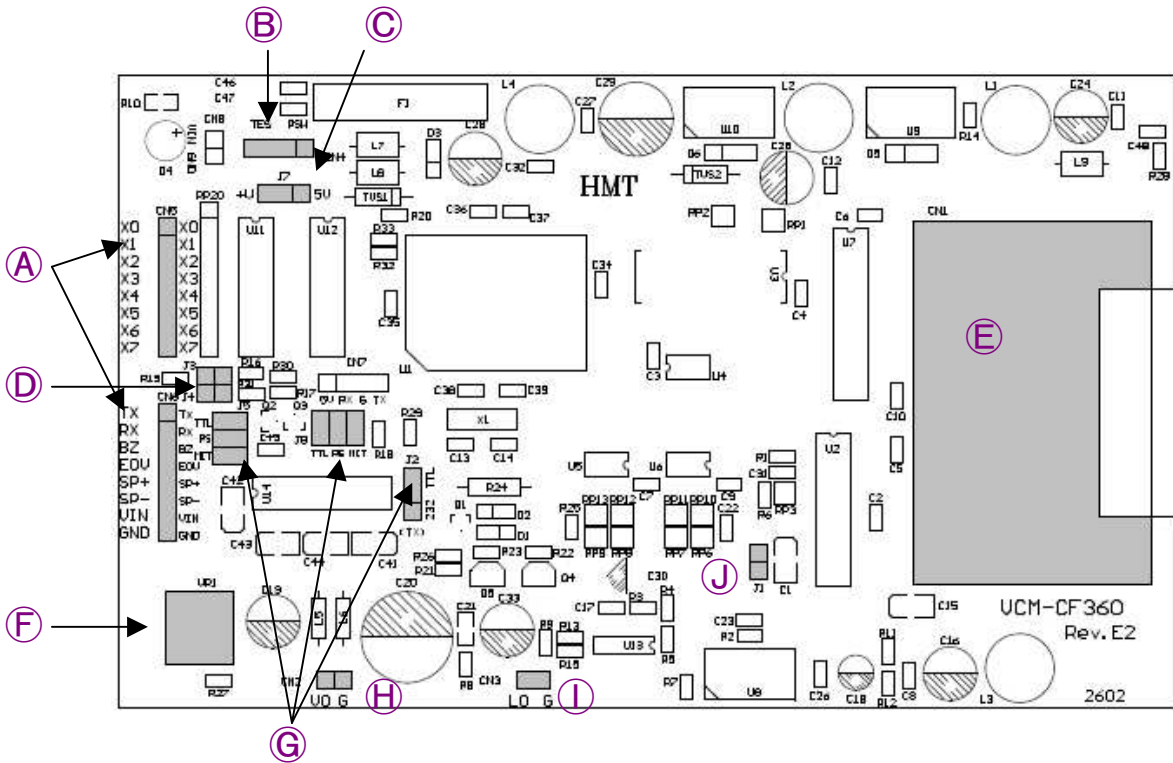
### Electronic Specification

Voltage Supply	DC 11 - 36 V / 0.8A (DC-DC)
Amplifier Output	3.5watt, Ro = 4 ohm
Consumption (Audio Output)	0.6A at DC 24 Vin
Consumption (Without Audio Output)	130mA at DC 24V
Trigger Inputs De-bounce Time	Signal length 80ms at least.
Watch Dog Function	Yes
Operating temperature	0°C - 70°C
Line Out	Yes
Volume Control	Yes
Serial baud rate and format	2400 bps / 4800 bps / 9600 bps, N, 8,1
Serial signal level	Tx: TTL, Rx: TTL / RS-232
PCB Dimension (L x W x H)	157 x 94 (mm)
Metal Box (Option)	Yes

# VCM-Series Product Data Sheet

Model Name: **VCM-CF360 Digital Voice Module**..... Rev. E2

## PCB Diagram / Jumpers & Connectors Description



A	<p>Input Pins Information</p> <p>CN5: Input Trigger Pins : X0-X7</p> <p>CN6: Tx, (Serial Signal Output) Rx: Serial Signal Input.(RS-232/TTL)</p> <p>BZ: Busy signal Output. EOVS: End of Voice Signal Output</p> <p>Sp+ / Sp- : Audio Output. Vin: Power Supply DC:11-36 V, 0.8A GND: Ground. (0V)</p>		
B	<p>CN4: To connect Switch. (For Box Use)</p> <p>Normal set at PSW side.</p>	G	<p>Serial Mode Jumper selections.</p> <p>J5,J8,J2 , RS-232: To short at “RS” side.</p> <p>TTL serial: To short at “TTL” side</p>
C	<p>Normal set at 5V side.</p>	H	<p>CN2: Audio Out with Amplifier.</p>
D	<p>J3,J4 unused.</p>	I	<p>CN3: “LO,G” Audio Out without Amplifier.</p>
E	<p>CF CARD Socket Type 2.</p>	J	<p>J1: Reset pins: System reset.</p>
F	<p>Volume Control.</p>	-----	-----

## VCM-Series Product Data Sheet

Model Name: **VCM-CF360 Digital Voice Module**..... Rev. E2

### Operation Note:

When Power supply is on, the system should sound out “Beep! Beep! ( two times)” It represents the P.C.B. and EPROM data programming are ready. If not, please check out CF-link software setting and all connections.

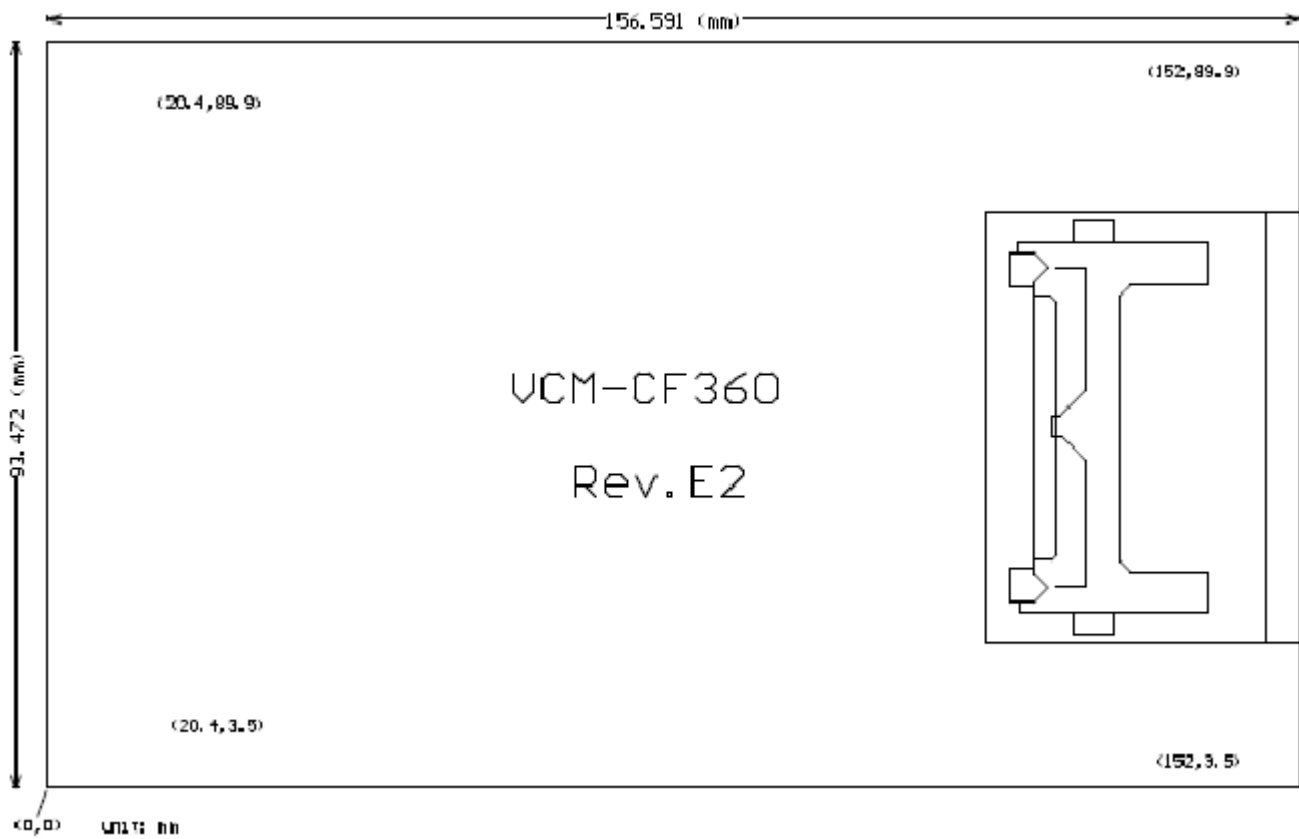
### VCM-CF Malfunction Alarm Situations & Solutions

Long beep	Short beep	Situations & Solutions
5	3	The chipboard is out of function. Please send it back to repair.
4	3	Please check if CF Memory Card is off or there’s no CF Memory Card inside.
3	3	CF Memory Card content is wrong. Please restore the content.
2	3	CF Memory Card content is wrong. Please restore the content.
1	3	CF Memory Card content is wrong. Please restore the content.
3	4	CF Memory Card content is wrong. Please restore the content.
2	4	CF Memory Card content is wrong. Please restore the content.
1	4	CF Memory Card content is wrong. Please restore the content.

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Model Name: **VCM-CF360 Digital Voice Module**..... Rev. E2

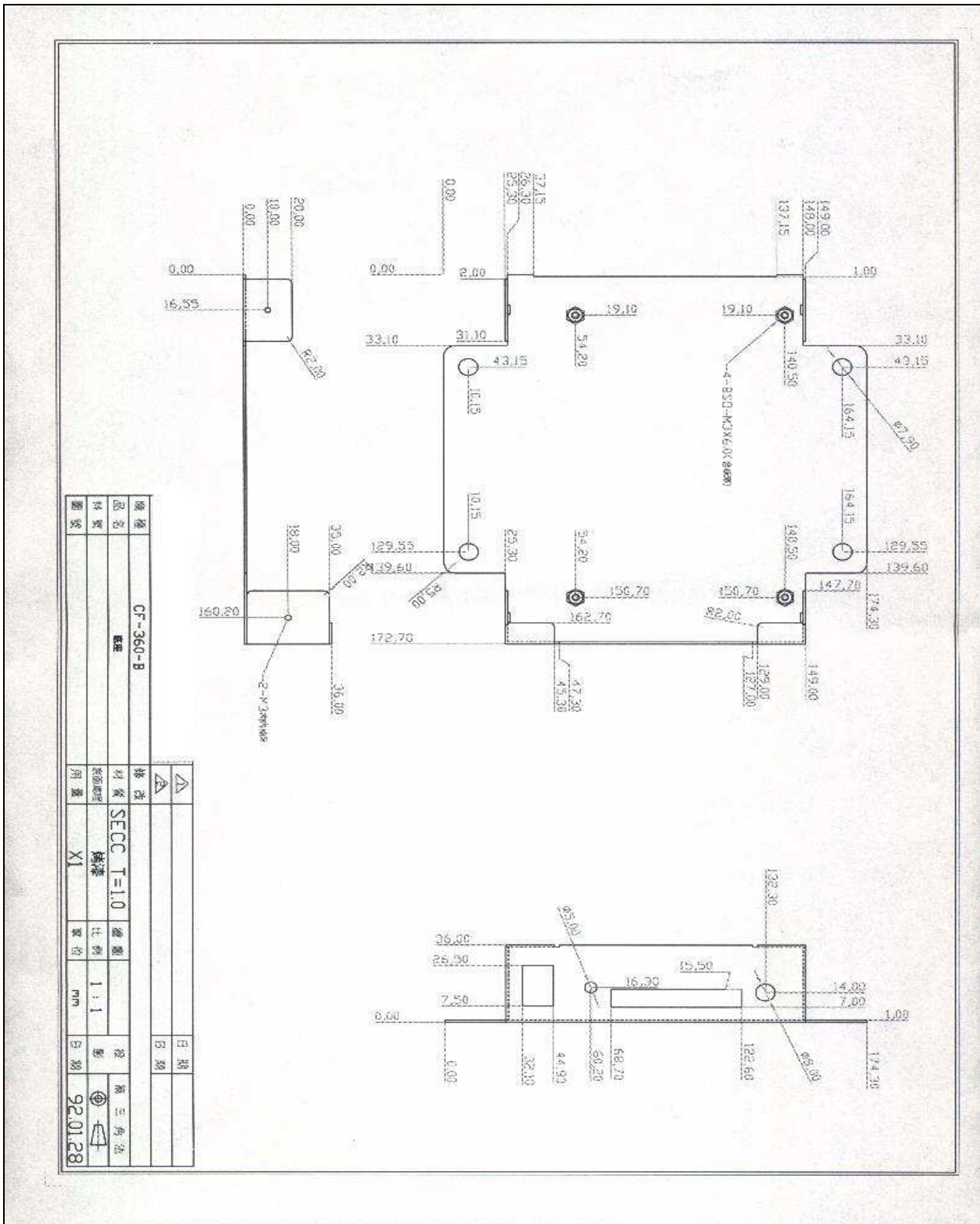
## PCB Dimension Diagram



# VCM-Series Product Data Sheet

Model Name: **VCM-CF360 Digital Voice Module**..... Rev. E2

## Metal Box Dimension Diagram



## VCM-Series Product Data Sheet

Model Name: **VCM-CF360 Digital Voice Module**..... Rev. E2

### **Metal Box Photo**

