

Introduction of the data recovery process about CSMU (Crash Survivable Memory Unit) and DVR for Arson Attack on No. 301 Bus in Helan Town Yinchuan City on 5th, Jan, 2016

Details of this serious incident

The No.301 bus which covered the route from Tianjun Garden Community to the Railway station of Yinchuan City burst into fires when passing the gate of Jinsheng Household Plaza at 7:00 a.m. on 5th, Jan, 2016. 3 minutes after calling the police, 78 firefighters and 10 fire trucks as well as other forces reached the site, they worked together for 5 minutes to put out the fire. Unfortunately, the casualties numbered 17 people (8 men and 9 women) and another 32 people (16 men and 16 women) got harsh injured, especially 6 heavy burnt and 1 extra severe burnt (TBSA \geq 99%).

The scene photos--from the authority website



The bus situation after this heavy fire—photo from the authority website



During the process of cleaning up the site, the experts confirmed that the DVR on this bus had connected with our company product—CSMU(Crash Survivable Memory Unit), and the engineers in our company flied to Yinchuan immediately on 6th,Jan,2016 for assistance to help the police to make all the data information retrievable. Below are the photos showing the recovery steps to export all the data information out.

Our product—CSMU after this heavy fire



Our product-
CMSU(QG-Ax series)
before this heavy fire

This is the remaining part of the DVR on that bus after the heavy fire



Copper antenna connector

Aluminum handle of the HD box

Iron shock pad



DVR shell

HD shell

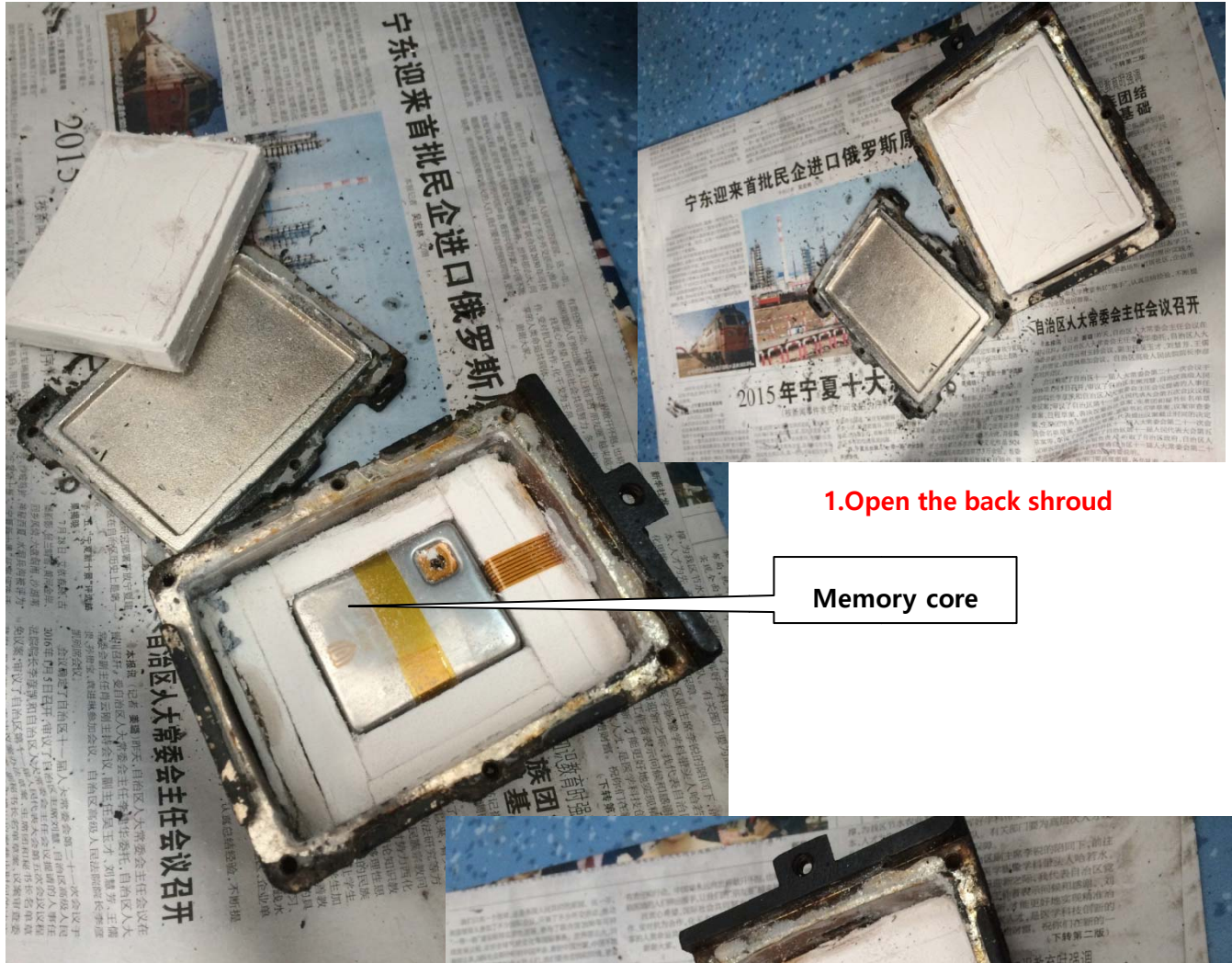
Shock pad and antenna of HD

1st Step: Open the PCB interface part, and the PCB has been burnt down.



This is the
PCB before
this heavy fire

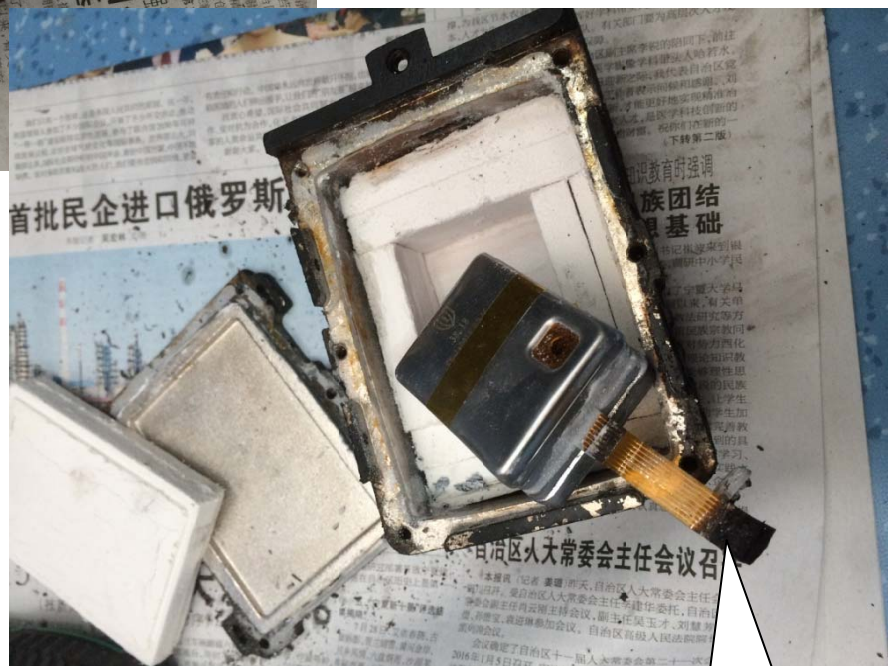
2nd Step: Open the CSMU and find the memory core appear normal



1. Open the back shroud

Memory core

2. Remove the bottom heat shield

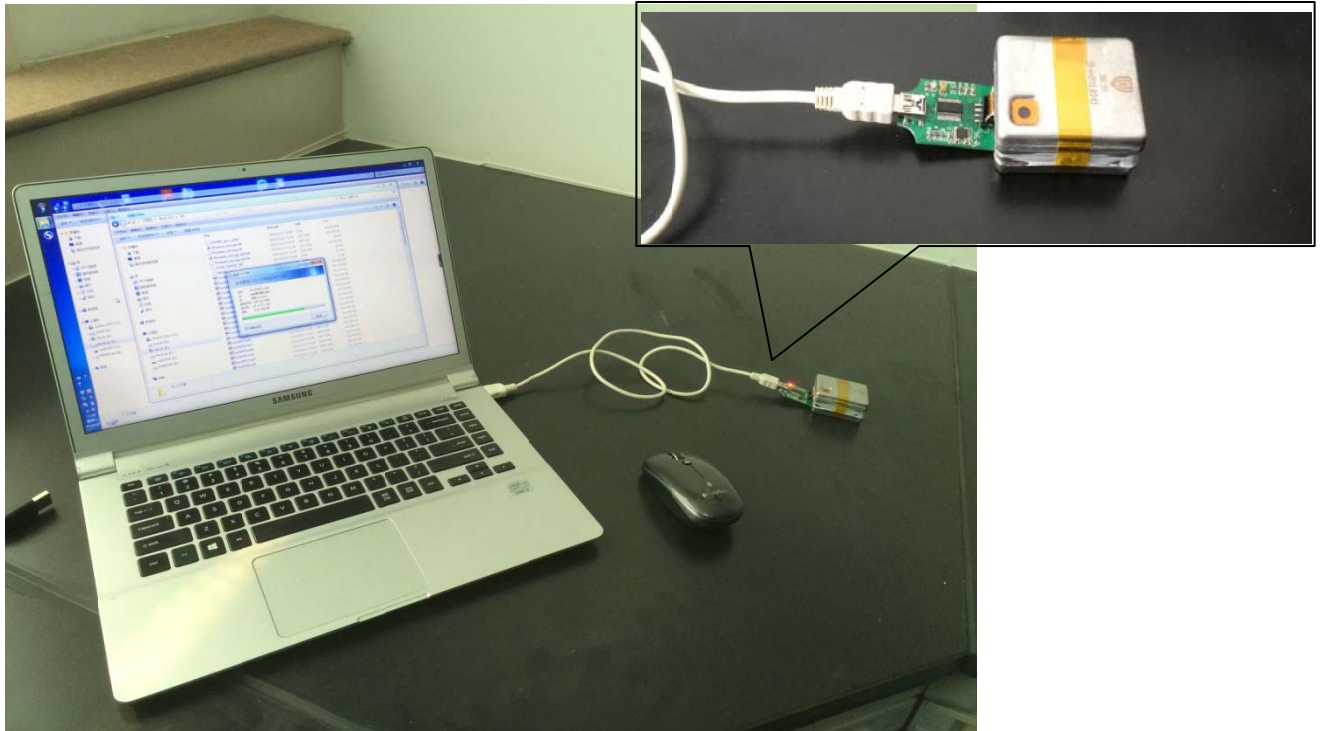


3. Take the memory core out

The end of FPC has been burnt down

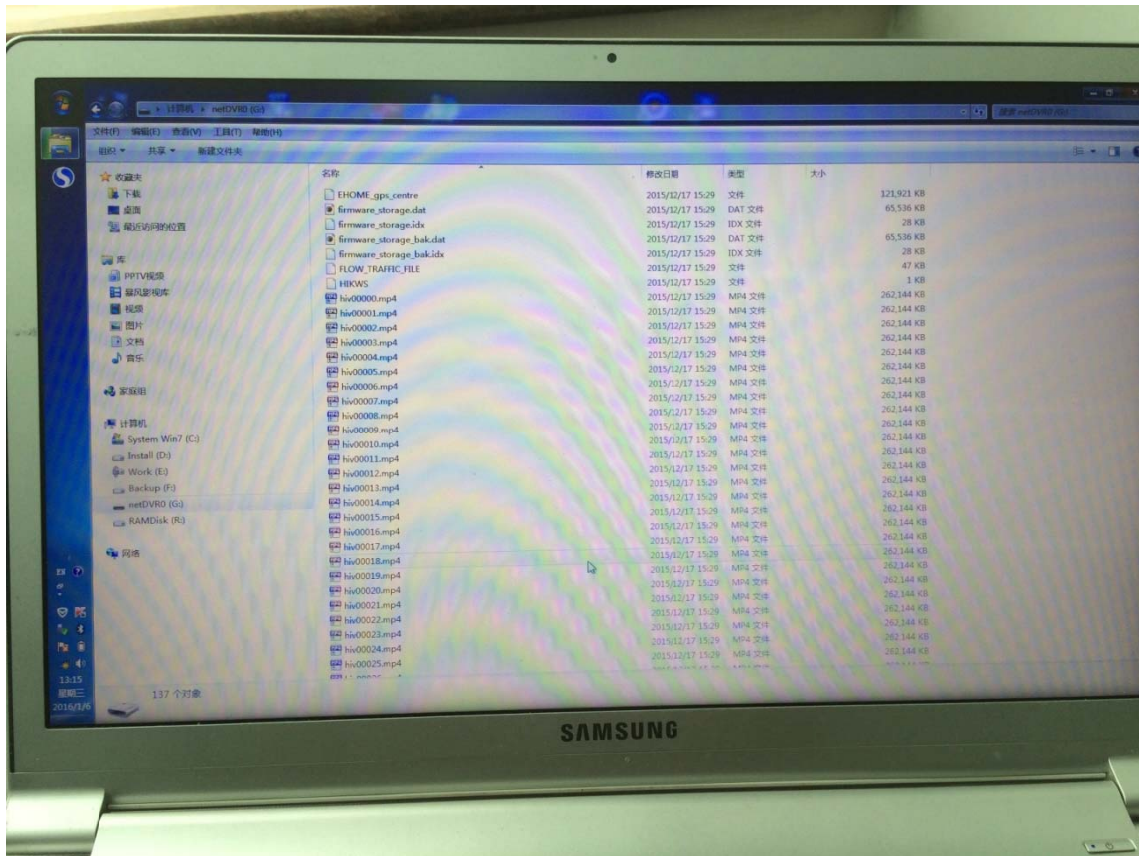
4. The remaining protective shell after taking the memory core out

3rd Step: Connect the memory core with a spare data connector for exporting data.



Finally, by all efforts of our engineers, every piece of the data information has been exported successfully: block files, index and the encrypted information all turned out intact.

Decryption: Send all these to the DVR manufacturer for decryption.



The original proof below in the two bags are collected from the exported data information from our CSMU, then seal all the proof up and hand over to the government authority and police.



Due to the exported data information from our CSMU as the proof original resource, the police soon found out that incident was an arson attack by someone on purpose, and the police arrested the criminal in one day.