SIM not recognized with libsamsung-ipc and libsamsung-ril

Introduction

This page attempts to list SIM cards that are known to be compatible with Replicant, and the ones were known not to be compatible because of a bug.

The main bug is fixed now and has been part of Replicant 4.0 0004 RC1, however we still need to make sure that all the reported bugs are also fixed as the symptoms could be similar but have another cause.

In order to make it easier to reproduce, a list of compatible and incompatible cards has stated to be sumarized here, mostly using the information from the various bugreports.

List of cards and related bugs

country	type	carrier	date	works	references	prices and conditions
France	contract	Free	? (years ago, 2013?)	Yes		
France	prepaid	SFR	bought the 2018-08-24 in Paris	Yes		
France	?	SFR	Very old card, expired	* Replicant 6.0: No * Replicant 4.2: Yes	#1909	N/A
France	prepaid	Orange	? (probably bought last year)	Yes	#1868	
France	conrtact?	Orange		No	#1868	
Italy	?	Fastweb		No	#1824	
Italy	?	Wind	older SIM cards	Yes	#1871	
Italy	prepaid	Wind		No	#1871	25E, valid one month, 10E per recharge
Spain	?	Vodafone	micro-SIM bought before the 2018-02-23	No	#1874	
NZ	prepaid	Spark	2013?	No		

History of SIM not recognized bugs

At the time of writing, we know of two completely different bugs that broke the detection of SIM cards.

Broken after Replicant 6.0 0004 RC2

Bug report(s): #2122.
Fix: sent for review for libsamsung-ipc
How it was broken: libsamsung-ipc was converted to a consistent code style. That kind of work is very mentally tiring as you keep doing the same thing again and again during many many hours, it's also very prone to mistakes because of that. So the person that did the conversion (GNUtoo) did a typo and that slipped through the review as well as reviewers have the same issue: they need to keep looking for the same thing again and again.

How it was Fixed: It was fixed with a bisect. libsamsung-ipc and libsamsung-ril were first bisected manually which consisted of picking a libsamsung-ipc+libsamsung-ril revision set, building it, wiping the data, installing the image, and booting the result and testing. To test if the SIM appeared in the welcome application (by displaying the SIM carrier name) it was good, if not I still tested if

the SIM was recognized in Settings->About phone->SIM status as sometimes you need to wait a bit before the SIM is ready. Once libsamsung-ril was removed of the equation, a simple bisect on libsamsung-ril was done. Then I bisected some functions inside the commit. this can be done by saving the older revision to a file with git ls-tree <previous-revision> -- path/to/file and git show <resulting_hash> > old_file. Then you can just use meld and keep track manually of the functions. And at then end reading the code was faster than testing so I did that.

Broken since Replicant 6.0 up to Replicant 6.0 000 RC1

Bug report(s): At least [#1909](#). Maybe [#1868](#), [#1868](#), [#1824](#), [#1871](#), [#1874](#) were related too but we'd need confirmation from the bug reporters.

Fix: [In libsamsung-ril](#)

How it was broken: Libsamsung-ril incorrectly implemented SIM message parsing, but for some reason it wasn't an issue in Replicant 4.2.
How it was Fixed: It was not possible to bisect as it was broken since the very first Replicant 6.0 version and it did work in Replicant 4.2 fine. So somehow "Replicant 6" broke it. GNUtoo also tried to understand what was happening by tracing the SIM but it wasn't enough to fix it. GNUtoo never found enough time to dig into the code and go look for what was really happening. So at the end Belgin did that and fixed it.