AccessionIndex: TCD-SCSS-T.20220825.006

Accession Date: 25-Aug-2022 Accession By: Dr.Brian Coghlan

Object name: Samsung Galaxy S4 Zoom smartphone/camera

Vintage: 2013

Synopsis: Superb combination of 10X optical SLR camera and Android mobile

smartphone, model SM-C101. S/N: CN1D701B1PW.

Description:

The Galaxy S4Zoom smartphone/camera, introduced by Samsung in 2013, was a superb combination of an Android mobile smartphone with a 10X optical 16MP BSI-CMOS SLR camera (24–240mm 35mm-equivalent) with f/3.1-6.3 lens, built-in optical image stabilizer, standard xenon flash, and both auto and manual camera control, that was capable of taking video in 1080p 30fps (full-HD), 720p at 60fps, or slow motion video at 768×512 pixels at 120fps. It also had a 1.9MP camera for video calls. See Figure 1 for the specification [1][2][3].

This device used a Pega-Dual +XMM6262 system-on-a-chip (SoC), including a 1.5GHz dual-core ARM Cortex-A9 CPU (multi-issue superscalar, out-of-order, with speculation and 4-way associative caches [4]) with a Mali-400 GPU. The SM-C101 was the base model, but there was an LTE 4G variant, the SM-C105.

The smartphone portion was comparable to the S4mini, with 8GB of memory, 1.5GB of RAM, 802.11 a/b/n/g WiFi, Bluetooth 4.0, and GPS, a micro-SIM slot, a micro-SDXC card slot, a type B microUSB port, and a Super-AMOLED screen showing 960 × 540 pixels, protected by the latest durable glass, Gorilla Glass 3. It was released with the Android 4.2.2 (JellyBean) software [5], and was upgradeable to Android 4.4.2 (*KitKat*) [6], but badly suffered from the S4 platform's inability to be upgraded beyond 4.4.2. The behaviour was identical to that of the S4mini, but with a better battery life, while the mobile benefited from the 16MP SLR camera, and vice-versa. Reviews were favourable as a camera, less so as a smartphone, since it was not comfortable in pockets and awkward to use upright as is usual for a phone [7]. Users, however, were more enchanted, and this was reflected in the fact that although Samsung supplied an official cover for the S4 Zoom [8] that included auto-standby when the lid closed, alternative covers quickly became available from other sources that were more suitable for photographers, including the Remax soft cover included with this item. Perhaps also reflecting this, Samsung manufactured a special portable battery charger, the EP-B740CE, purportedly to ensure the S4 Zoom never ran out of power. But of course it required 5V power from a USB charger, which the S4Zoom could be directly charged from, so it was more sensibly used to charge a spare battery for use in field trips if the S4 Zoom's battery ran out of power. The S4 Zoom used a specific 2330mAh Li-Ion battery that gave up to 570 hours of standby time and up to 13 hours of talk time, rechargable at 5V via its USB interface. Despite the size of the battery, the S4 Zoom was surprisingly compact, only 126 x 64 x 15mm in size, but was quite heavy, weighing 208g (almost twice the 107g of the S4mini).

In June 2014 a successor, the Galaxy K Zoom, was introduced, but sadly a year later Samsung began withdrawal from the camera market, finally withdrawing in 2017.

Many thanks to Brian Coghlan for donating this very interesting item.

The homepage for this catalog is at: https://www.scss.tcd.ie/SCSSTreasuresCatalog/ Click 'Accession Index' (1st column listed) for related folder, or 'About' for further guidance. Some of the items below may be more properly part of other categories of this catalog, but are listed here for convenience.

Accession Index	Accession Index Object with Identification		
TCD-SCSS-T.20220825.006.001	Samsung Galaxy S4 Zoom smartphone/camera. Superb		
	combination of 10X optical SLR camera and Android mobile		
	smartphone, model SM-C101. S/N: CN1D701B1PW. 2013.		
TCD-SCSS-T.20220825.006.002	Samsung Flip Cover for Samsung Galaxy S4 Zoom.		
TCD-SCSS-T.20220825.006.003	Remax soft skin cover for Samsung Galaxy S4 Zoom.		
TCD-SCSS-T.20220825.006.004	Samsung EP-B740CE battery charger. USB-powered		
	charger for a spare battery for a Samsung Galaxy S4 Zoom		
	smartphone. S/N: DK1DA15MS/94 E. 2013.		

References:

- 1. Wikipedia, *Samsung Galaxy S4 Zoom*, see: https://en.wikipedia.org/wiki/Samsung_Galaxy_S4_Zoom Last browsed to on 25-Aug-2022.
- 2. gsmarena.com, *Samsung Galaxy S4 zoom*, see: https://www.gsmarena.com/samsung_galaxy_s4_zoom-5447.php
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- 3. Samsung, *Galaxy S4 zoom (3G)*, see:

 https://www.scss.tcd.ie/SCSSTreasuresCatalog/hardware/TCD-SCSS-T.20220825.007/Consumer-mobile-devices-smartphones-g-C101-wwwSAMSUNGcom.pdf
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- 4. ARM, *The ARM Cortex-A9 Processors*, see: https://www.scss.tcd.ie/SCSSTreasuresCatalog/hardware/TCD-SCSS-T.20220825.007/ARMCortexA-9Processors.pdf
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- 5. Samsung, Samsung SM-C101 User Manual (June 2013), see: https://www.scss.tcd.ie/SCSSTreasuresCatalog/hardware/TCD-SCSS-T.20220825.007/SamsungGalaxyS4Zoom-SM-C101-UserManual-EU-JellyBean-EN-rev1-Jun2013.pdf
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- 6. Samsung SM-C101 User Manual (September 2014), see: https://www.scss.tcd.ie/SCSSTreasuresCatalog/hardware/TCD-SCSS-T.20220825.007/SamsungGalaxyS4Zoom-SM-C101-UserManual-EU-Kitkat-EN-rev1-11Sep2014.pdf
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 https://www.scss.tcd.ie/SCSSTreasuresCatalog/hardware/TCD-SCSS-T.20220825.007/Blog-77339-Samsung-Galaxy-S4-Zoom-review-wwwFONARENAcom.pdf
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- 8. mobilefun.co.uk, *Samsung Flip Cover for Samsung Galaxy S4 Zoom*, see: https://www.scss.tcd.ie/SCSSTreasuresCatalog/hardware/TCD-SCSS-T.20220825.007/Flip-cover-for-Samsung-Galaxy-S4-Zoom-wwwMOBILEFUNcoUK.pdf
 Last browsed to on 25-Aug-2022.

	Announced Status Dimensions Weight Build SIM Type Size Resolution Protection OS Chipset CPU	2013, June. Released 2013, July Discontinued 125.5 x 63.5 x 15.4 mm (4.94 x 2.5 x 0.61 in) 208 g (7.34 oz) Glass front (Gorilla Glass 3), plastic back, plastic frame Micro-SIM Super AMOLED 4.3 inches, 51.0 cm² (~64.0% screen-to-body ratio) 540 x 960 pixels, 16:9 ratio (~256 ppi density) Corning Gorilla Glass 3 Android 4.2.2 (Jelly Bean), upgradable to 4.4.2 (KitKat) Pega-Dual +XMM6262	
DISPLAY	Weight Build SIM Type Size Resolution Protection OS Chipset	208 g (7.34 oz) Glass front (Gorilla Glass 3), plastic back, plastic frame Micro-SIM Super AMOLED 4.3 inches, 51.0 cm² (~64.0% screen-to-body ratio) 540 x 960 pixels, 16:9 ratio (~256 ppi density) Corning Gorilla Glass 3 Android 4.2.2 (Jelly Bean), upgradable to 4.4.2 (KitKat)	
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PLATFORM	Resolution Protection OS Chipset	540 x 960 pixels, 16:9 ratio (~256 ppi density) Corning Gorilla Glass 3 Android 4.2.2 (Jelly Bean), upgradable to 4.4.2 (KitKat)	
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PLATFORM	OS Chipset	Android 4.2.2 (Jelly Bean), upgradable to 4.4.2 (KitKat)	
PLATFURM	Chipset		
		rega-Dual Alvino202	
	CPU	Dual-core 1.5 GHz Cortex-A9	
	GPU	Mali-400	
MEMORY	Card slot	microSDXC (dedicated slot)	
	Internal	8GB 1.5GB RAM	
CAMERA Fe	Single	16 MP, 1/2.33", 24-240mm, 10x optical zoom, AF, OIS	
	Features	Xenon flash, HDR, panorama	
	Video	1080p@30fps	
	Single	1.9 MP	
CAMERA	Video		
SOUND L	Loudspeaker	Yes	
	3.5mm jack	Yes	
COMINIO	WLAN	Wi-Fi 802.11 a/b/g/n, dual-band, Wi-Fi Direct, DLNA, hotspot	
	Bluetooth	4.0, A2DP, LE, aptX	
	GPS	Yes, with A-GPS, GLONASS	
	NFC	Yes	
Infrared po Radio USB	Infrared port	Yes	
	manufacture	No	
	USB	microUSB 2.0 (MHL TV-out), USB On-The-Go	
FEATURES S	Sensors	Accelerometer, gyro, proximity, compass	
	CONCOLO	S-Voice natural language commands and dictation	
BATTERY	Туре	Li-Ion 2330 mAh, removable	
DATTENT	Stand-by	Up to 570 h (3G)	
	Talk time	Up to 13 h (3G)	
	Music play	Up to 46 h	
	Colors	White, Dynamic Black	
MISC	Models	SM-C1010, SM-C101, SM-C105	
	SAR	0.35 W/kg (head) 1.05 W/kg (body)	
	SAR EU	0.14 W/kg (head) 0.20 W/kg (body)	
	Price	About 280 EUR	
TEATA			
TESTS	Display	Contrast ratio: Infinite (nominal) / 3.118:1 (sunlight)	
	Camera	Photo / Video	
	Loudspeaker	Voice 73dB / Noise 66dB / Ring 75dB	
	Audio quality Battery life	Noise -91.5dB / Crosstalk -90.5dB Endurance rating 61h	

Figure 1: Samsung Galaxy S4 Zoom specifications from gsmarena.com



Figure 2: Samsung Galaxy S4 Zoom lower front view



Figure 3: Samsung Galaxy S4 Zoom upper front view



Figure 4: Samsung Galaxy S4 Zoom with official cover closed



Figure 5: Samsung Galaxy S4 Zoom with official cover open

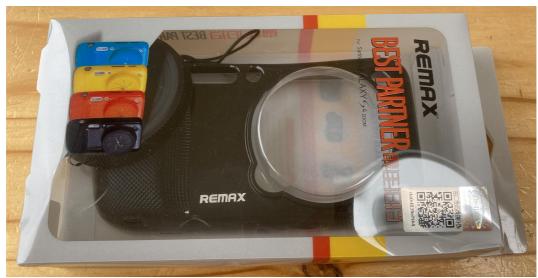


Figure 6: Remax soft skin cover for Samsung Galaxy S4 Zoom top view



Figure 7: Remax soft skin cover for Samsung Galaxy S4 Zoom bottom view



Figure 8: Samsung EP-B740CE charger for S4 Zoom battery top view with cover closed



Figure 9: Samsung EP-B740CE charger for S4 Zoom battery top view with cover open

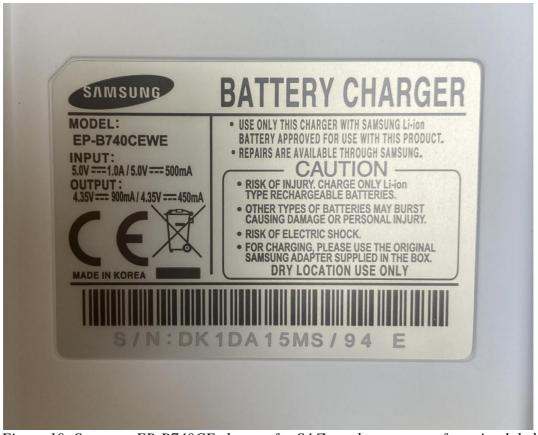


Figure 10: Samsung EP-B740CE charger for S4 Zoom battery manufacturing label