

NOKIA

BSC

Changing the SBCON1A timing signal phase

HW Technical Note
No. 146

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TN146 Changing the SBCON1A timing signal phase

Validity:

Software			
<input type="checkbox"/>	S9	<input checked="" type="checkbox"/>	GSM 900
<input type="checkbox"/>	S10	<input checked="" type="checkbox"/>	GSM 1800
<input checked="" type="checkbox"/>	S10.5	<input checked="" type="checkbox"/>	GSM 1900
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Keywords:

SBCON1A, BSC3i, TIMING SIGNAL PHASE, ET2A-T, ET2E-T, ET2E-TC

Summary:

This HW TN gives instructions how to change the SBCON1A timing signal phase to correct value in all BSC3i deliveries before week 43/2004.

Change has been implemented to new deliveries from week 43/2004 onwards.

Change of the timing signal should be done in next scheduled site visit. There is no need for specific mandatory site visit, because of wrong setting currently.

Description:

The SBCON1A is a jumper setting module, which is related to SWCOP-A settings.

With SBCON1A jumpers W3 and W4 it is possible to adjust timing signal phase for each group switch. From the very beginning of BSC3i deliveries there has been wrong selection for timing signal phase and this error arises with new ET2 T-variants and new ET generations, as they are more crucial for exact timing signal phase.

The SBCON1A is mounted into the Marker and Cellular Management Unit cartridges (MCMU/CC4C-A) on their back plane connectors.

Recommendation

- This default setting change is needed to be done for all BSC3s at the same time when new ET variants: ET2A-T, ET2E-T or ET2E-TC cards are taken into use.
- For all the rest of BSC3s, which have only previous ET variants, this change can be done together with some common maintenance work.

Instruction:

Note! This change operation will not affect for traffic as it will be done for MCMUs alternately.

The change procedure:

1. Change SP-state MCMU-unit to SE-NH-state (ZUSC).
 - i.e. ZUSC:MCMU,1:TE;
ZUSC:MCMU,1:SE;
ZUSC:MCMU,1:SE;
2. Switch the MCMU's power off from the PSC6-plug-in unit.
 - a) Detach SBCON1A circuit board from the MCMU cartridge backplane and change W4-jumper block according to the Table 1. (W3: 2-3 W4: 1-2). Attach SBCON1A back to the MCMU cartridge backplane connector.

Caution! Be careful to avoid bending the backplane connector pins.

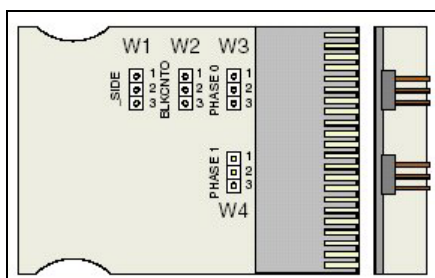


Figure 1. SBCON1A Circuit-Board

Selection	Cable lenght	W3	W4
Advanced by 61 ns	Over 10 m	1-2	2-3
Advanced by 30.5 ns	6.0 – 9.9 m	1-2	1-2
0 ns (Default setting)	2.6 – 5.9 m	2-3	1-2
Delayed by 30.5 ns	For test use only	2-3	2-3

Table 1. Setting of the Basic timing signal phase

Selection	W1
Group switch side 0	2-3
Group switch side 1	1-2

Table 2. Selecting the group switch side.

Note! MCMU-0: W1=2-3, MCMU-1: W1=1-2

3. Change the SE-NH-state MCMU to the TE and run MCMU diagnostics (ZUSC, ZUDU).
 - i.e. ZUSC:MCMU,1:SE;
ZUSC:MCMU,1:TE;
ZUDU:MCMU,1;
4. If the diagnostics are OK, change the TE-EX state MCMU to SP-EX state.
 - i.e. ZUSC:MCMU,1:SP;
5. Make MCMU switchover.
 - i.e. ZUSC:MCMU,1:WO;

6. Repeat steps 1- 6 for the other MCMU-unit.

Note:

For more detailed information please take contact to your local Nokia representative.

Reference:

BSC HW TN 143 NEW ET VARIANT FOR S10.5 ANSI BSC AND TCSM
BSC HW TN 145 NEW ET VARIANTS FOR S10.5 ETSI BSC AND TCSM

Technical Note Revision History

DATE	VERSION	EDITOR	SUMMARY OF CHANGES
15.10.2004	1.0	H.Juvonen	

List of Active BSC HW Technical Notes:**BSC HW Technical Notes**

Type	Nbr.	Title	S9	S10	S10.5	S11	S11.5
GEN	146	CHANGING THE SBCON1A TIMING SIGNAL PHASE			X	X	X
GEN	145	NEW ET VARIANTS FOR S10.5 ETSI BSC AND TCSM			X		
GEN	144	MINIMUM HW REQUIREMENTS FOR BASIC BSC S11.5 SW RELEASE					
GEN	143	NEW ET VARIANT FOR S10.5 ANSI BSC AND TCSM			X		
GEN	142	ESB20 INTERCHANGEABILITY E			X		
GEN	141	NEW BSC3I ESB LAN SWITCH UPGRADE			X	X	
GEN	140	NEW BSC3I ESB LAN SWITCH			X	X	
GEN	139	PSCG3-B NEW INTERCHANGEABILITY B			X	X	
GEN	138	NEW VISUAL DISPLAY UNIT VT5500	X	X	X	X	
GEN	137	PSFP-T, INTERCHANGEABILITY CHANGE	X	X	X	X	
GEN	136	PACKET CONTROL UNITS EQUIPPING RULES IN BSC	X	X	X		
GEN	135	CP710-A INTERCHANGEABILITY D	X	X	X	X	
GEN	134	ET2A RETROFIT	X	X			
GEN	133	NEW HW PRODUCTS FOR BSC S11 DELIVERIES			X		
GEN	132	BSC S11 REQUIREMENT SUMMARY			X	X	
GEN	131	NEW VISUAL DISPLAY UNIT VT30	X	X	X		
GEN	130	THE AVAILABILITY OF NOKIA BSC2i ETSI AND BSC2i ANSI PRODUCTS	X	X	X		
GEN	129	MODIFIED S9 BSC2i WITH NEW HW	X				
GEN	128	CP710-A RETROFIT INTERCHANGEABILITY C			X	X	
GEN	127	CP710-A INTERCHANGEABILITY CHANGE			X	X	
GEN	126	MINIMUM I/O-DEVICE REQUIREMENTS FOR BSC S11 SW RELEASE				X	

GEN	125	NEW WINCHESTER DISK DRIVE UNIT WDW36	X	X	X	
GEN	124	MINIMUM CPU AND MEMORY REQUIREMENTS FOR BSC S11 SW RELEASE				X
GEN	123	INTERCHANGEABILITY B OF NEBS KIT	X	X	X	
GEN	122	NEW HW PRODUCTS FOR BSC S10.5 DELIVERIES			X	
GEN	121	NEW VISUAL DISPLAY UNIT VT1010	X	X	X	
ETSI	120	AS7-U INTERCHANGEABILITY L	X	X		
GEN	119	ADAPTER SUMMARY FOR BSC I/O- DEVICES	X	X		
GEN	118	NEW DIGITAL AUDIO TAPE 20GB	X	X	X	
GEN	117	BSC S10.5 CPU MEMORY UPGRADE INSTRUCTIONS			X	
GEN	116	NEW WINCHESTER DISK DRIVE UNIT WDW18-S	X	X		
GEN	115	MINIMUM CPU AND MEMORY REQUIREMENTS FOR BSC S10.5 SW RELEASE			X	
GEN	114	NEW PLUG-IN UNITS FOR BSC S10 DELIVERIES		X		
ANSI	113	ET2A INTERCHANGEABILITY C	X	X		
GEN	112	AS7-VA VERSION 02	X	X		
GEN	111	AS7-V VERSION 05	X	X		
GEN	110	SW64B INTERCHANGEABILITY B	X	X		
GEN	109	ET2A VERSION 3A	X	X		
GEN	108	MC1C INTERCHANGEABILITY D	X	X		
GEN	107	TC1C VERSION 03	X	X		
GEN	106	ALTERNATIVE CONFIGURATION FOR VT525	X	X		
GEN	105	CPU MEMORY UPGRADE		X		
GEN	104	CVKT POWER SUPPLY CABLE	X			
GEN	103	TRCO VERSION 3B	X			
GEN	102	NEW WINCHESTER DISK DRIVE UNIT WDW18	X			
GEN	101	AS7-V VERSION 4B	X			
GEN	100	PSCG5 INTERCHANGEABILITY C	X			
GEN	099	PCU JUMPER SETTINGS	X			
GEN	098	NEW WINCHESTER DISK DRIVE UNIT WDW18	X			
GEN	097	SCSI CABLE CJE AND CJF VERSION 02	X			
GEN	096	PSC4-S VERSION 2B	X			
GEN	095	DAT12G VERSION 2	X			
GEN	094	MINIMUM CPU AND MEMORY REQUIREMENTS FOR BSC S10 SW RELEASE		X		
ETSI	093	PCU VERSION 1A	X			
GEN	092	AS7-V VERSION 4B				
GEN	091	WDAD-S VERSION 1A	X			
ANSI	090	TR12-T INTERCHANGEABILITY C	X			
ETSI	089	TR16-S INTERCHANGEABILITY D	X			
ETSI	088	PCU INTERCHANGEABILITY B AND C	X			
GEN	087	AVAILABILITY OF NOKIA BSC2E AND BSC2A EQUIPMENTS	X			
GEN	086	SD3C-S VERSION 1A	X			
GEN	085	HDAD2-A VERSION 03	X			
GEN	084	ET5C INTERCHANGEABILITY B	X			
GEN	083	CP6LX VERSION 2A	X			
GEN	082	AS7-V INTERCHANGEABILITY D	X			
GEN	081	TC1C VERSION 02	X			
GEN	080	DAT12G RETROFIT	X			
ETSI	079	ADDITIONAL INFORMATION TO BSC GPRS HW	X			
ANSI	077	TR12-T VERSION 2B	X			
ETSI	076	TR16-S VERSION 2B	X			
GEN	075	TRCO VERSION 3A	X			
GEN	074	SCSIT-S VERSION 3A	X			

GEN	073	AS7-V RETROFIT, INTERCHANGEABILITY CHANGE FROM B TO C	X			
GEN	072	CP6LX RETROFIT, INTERCHANGEABILITY F AND VERSION 02	X			
GEN	071	NEW PLUG-IN UNIT VERSIONS	X			
GEN	070	INCORRECT AS7-V JUMPER SETTING	X			
ETSI	069	CORRECTION TO TR16-S VERSION 02	X	X		
ANSI	068	NEW ADAPTER FOR CCS#7; AS7-VA		X		
ETSI	067	NEW PLUG-IN UNITS FOR BSC S9 DELIVERIES		X		
ETSI	066	BSC GPRS HW		X		
GEN	065	PSC4-S MODIFICATION	X	X		
ANSI	064	TR12-T VERSION 02	X	X		
ETSI	063	TR16-S VERSION 02	X	X		
GEN	062	MINIMUM CPU REQUIREMENTS FOR BSC S9 SW RELEASE		X		
GEN	061	NEW DISPLAY CONTROLLER, VT525	X	X		
GEN	060	BSC SW S8 FIELD INSTALLATION STATUS	X			
GEN	052	MEMORY MODULE MM32M-S USAGE WITH CP4HX	X	X		
GEN	051	DAT12G MICROCODE CHANGE	X	X		
GEN	050	DAT12G MICROCODE CHANGE	X	X		
GEN	049	SCSIT-S VERSION 2A	X	X		
GEN	048	NEW PRINTER LPT38-S	X	X		
GEN	047	HWAT VERSION 3A	X	X		
GEN	046	FDD-S VERSION 5A	X	X		
GEN	045	MEMORY UPGRADING INSTRUCTIONS, CP4HX	X	X		
GEN	044	MINIMUM HW REQUIREMENTS FOR BSC SW RELEASE S8	X	X		
GEN	043	CPU EQUIPPING RECOMMENDATION	X	X		
GEN	042	FAULTY GAL COMPONENTS	X	X		
GEN	041	ET5C VERSION CHANGE	X	X		
GEN	040	NEW 4 GB WINCHESTER, WDW4	X	X		
GEN	039	NEW CARTRIDGE POWER SUPPLY, PSC1-S	X	X		
GEN	038	NEW CPU, CP4HL	X	X		
GEN	037	NEW DIGITAL AUDIO TAPE 12GB	X	X		
GEN	036	FAULTY GAL COMPONENTS ON SEVERAL PIUS	X	X		