

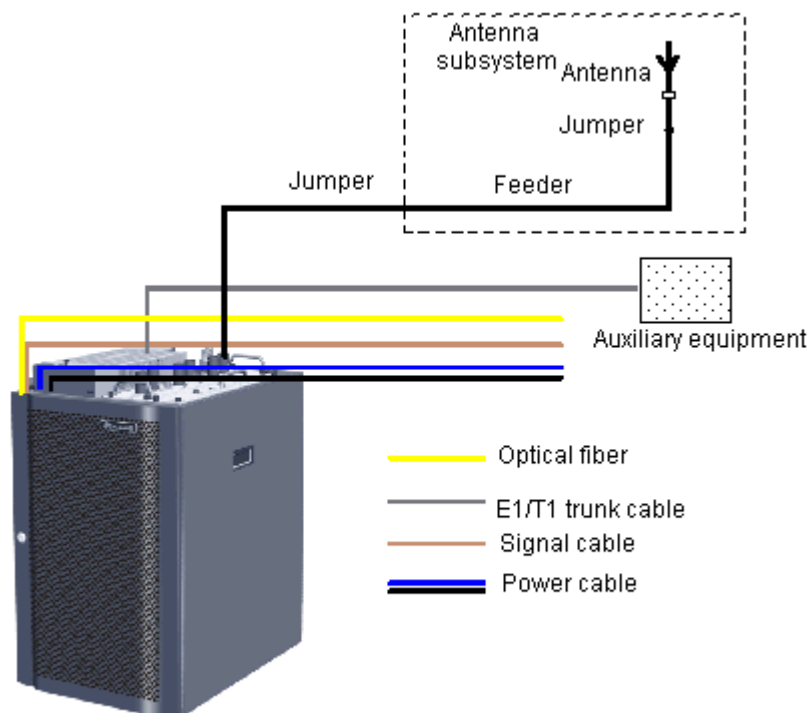
1 Overall Structure of the BTS3606C

About This Chapter

This topic describes the overall structure of the BTS3606C. The BTS3606C consists of the cabinet, subracks, components, cables, auxiliary devices, and antenna subsystem.

Figure 1-1 shows the hardware structure of the BTS3606C.

Figure 1-1 Hardware structure of the BTS3606C



1.1 Physical Structure of the BTS3606C

This topic describes the physical structure of the BTS3606C. The BTS3606C cabinet consists of the baseband subrack, the RF subrack, the power supply subrack, and the fan subrack. A single

cabinet supports a maximum of six sector carriers. The BTS3606C supports the extended RF subrack. When the extended RF subrack is configured, a fully configured BTS3606C cabinet supports 12 sector carriers.

[1.2 Logical Structure of the BTS](#)

This topic describes the logical structure of the BTS. By function, the components of the BTS can be divided into five logical subsystems.

[1.3 Software Structure of the BTS](#)

This topic describes the software structure of the BTS. The BTS has the operation and maintenance (OM) software and the running software.

1.1 Physical Structure of the BTS3606C

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Figure 1-2 shows the BTS3606C cabinet.

Figure 1-2 BTS3606C cabinet



The extended RF subrack can be configured on the left or right side of the cabinet. **Figure 1-3** shows the BTS3606C cabinet with an extended RF subrack.

Figure 1-3 BTS3606C cabinet with an extended RF subrack

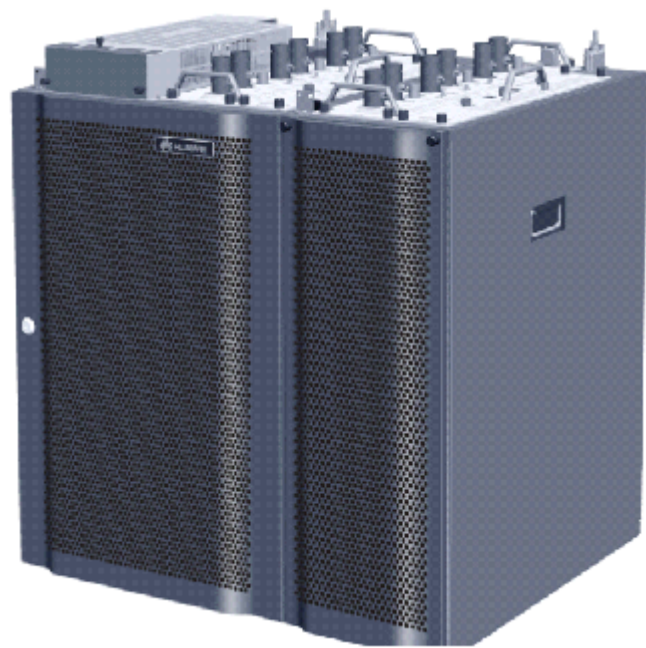
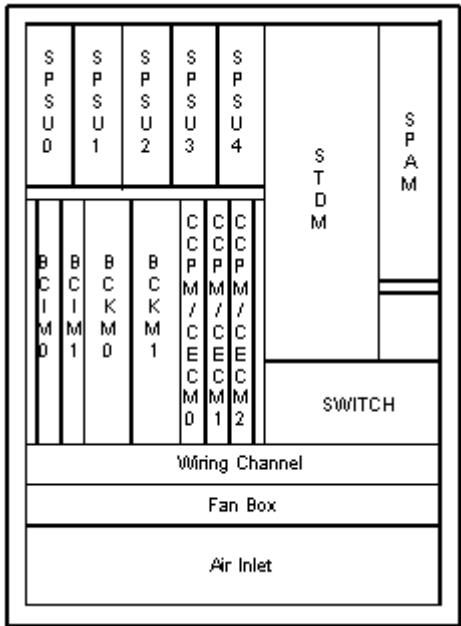


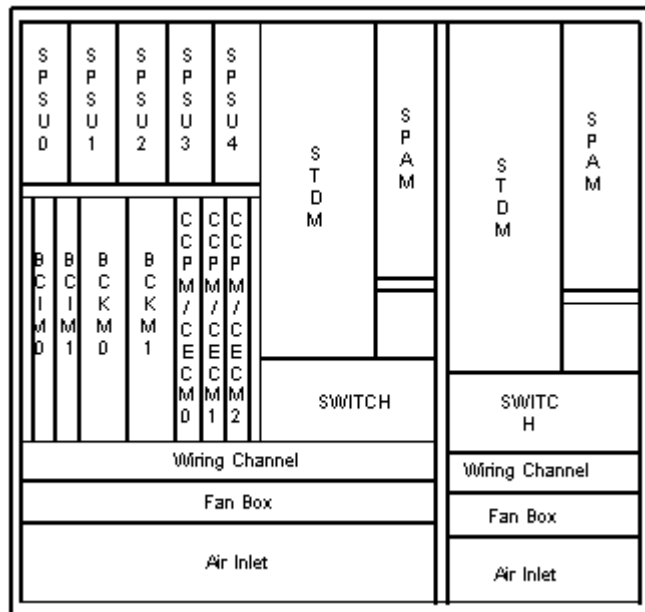
Figure 1-4 shows the full configuration of the BTS3606C cabinet.

Figure 1-4 Full configuration of the BTS3606C cabinet



When the extended RF subrack is configured, the fully configured BTS3606C cabinet supports 12 sector carriers. Figure 1-5 shows the full configuration of the BTS3606C cabinet with an extended RF subrack.

Figure 1-5 Full configuration of the BTS3606C cabinet with an extended RF subrack



The subracks in the BTS3606C cabinet are as follows:

Baseband Subrack

The baseband subrack is located in the center part of the cabinet and is used to hold the baseband boards. The baseband boards are as follows:

- BCIM ([QCK2BCIM](#), [QC52BCIM](#), [QC53BCIM](#), [QC54BCIM](#))
- [BCKM](#)
- CCPM ([QCK2CCPM](#), [QCK3CCPM](#))
- [CECM](#)

RF Subrack

The RF subrack is located in the upper right part of the BTS3606C cabinet and is used to hold the RF modules. The RF modules are as follows:

- [STD M](#)
- [SPAM](#)

NOTE

The STD M consists of one STRM and one SDFU.

Extended RF Subrack

The BTS3606C supports the extended RF subrack, which is configured on the left or right side of the cabinet to hold the STD M and the SPAM.

Power Supply Subrack

The power supply subrack is located in the upper part of the cabinet and above the baseband subrack. The power supply subrack is used to hold the SPSUs, which convert -48 V DC power supply into $+24\text{ V}$ DC power supply so that it can be used by the parts of the BTS3606C cabinet.

Fan Subrack

The fan subrack is located in the lower part of the cabinet and is used to hold the cooling fans.

Other Devices

Other devices configured in the cabinet are as follows:

- Power switch, used to power on and power off the cabinet
- Cabling trough, used for cabling in the cabinet

1.2 Logical Structure of the BTS

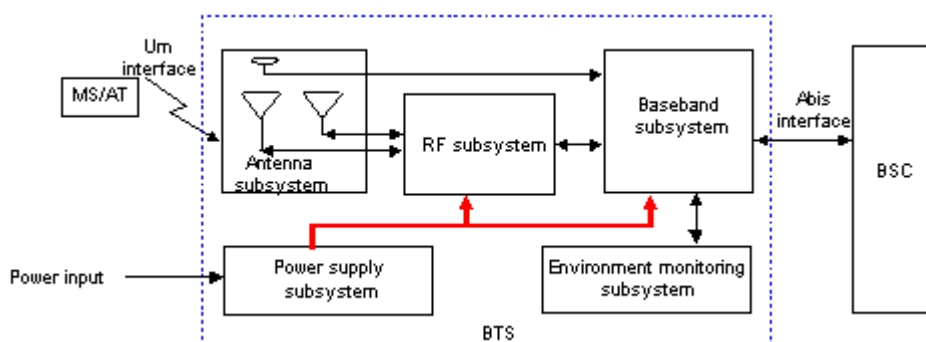
This topic describes the logical structure of the BTS. By function, the components of the BTS can be divided into five logical subsystems.

The logical subsystems of the BTS are as follows:

- **Baseband subsystem**
- **RF subsystem**
- **Antenna subsystem**
- **Power supply subsystem**
- **Environment monitoring subsystem**

Figure 1-6 shows the logical structure of the BTS.

Figure 1-6 Logical structure of the BTS



1.3 Software Structure of the BTS

This topic describes the software structure of the BTS. The BTS has the operation and maintenance (OM) software and the running software.

OM Software

Figure 1-7 Structure of the OM software

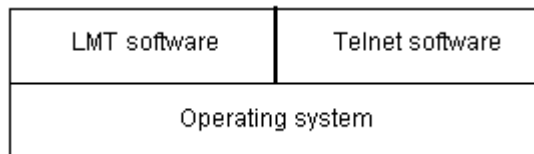


Figure 1-7 shows the structure of the BTS OM software, which consists of:

- The local maintenance terminal (LMT) software
- The Telnet software

BTS Running Software

Figure 1-8 Structure of the BTS running software

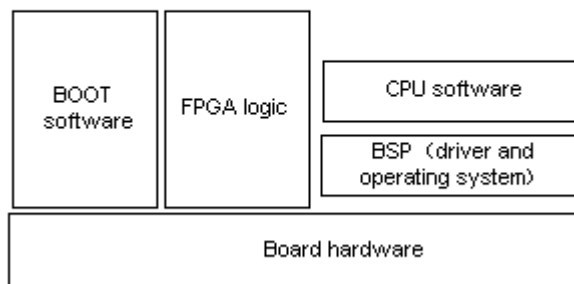


Figure 1-8 shows the structure of the BTS running software, which consists of:

- The FPGA logic
 - The CCPM/CECM logic
 - The BCIM logic (QC54BCIM)
 - The STRM logic
- The CPU software
 - The BCKM software
 - The BCIM software
 - The CCPM/CECM software
 - The STRM software
- The BOOT software

