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Broadband Communications Sector

SURFboard® SB5100 Series Cable Modem DOCSIS/Euro-DOCSIS

Notes:

- A** Modem Power-on System Test (POST). If LED remains blinking, faulty modem.

- B** Modem scanning downstream frequencies.

- C** Modem ranging upstream.

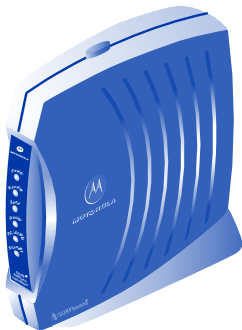
- D** Downstream and Upstream acquired. Modem processing for DHCP, TFTP, and TOD.

- E** Modem operational. PC/ Activity is solid when a CPE is connected and blinks when transmitting or receiving data.

















































- F** "Standby" switch enabled. Modem successfully completed boot sequence and all LED's blink off, except "Standby".

- G** Modem powered off.

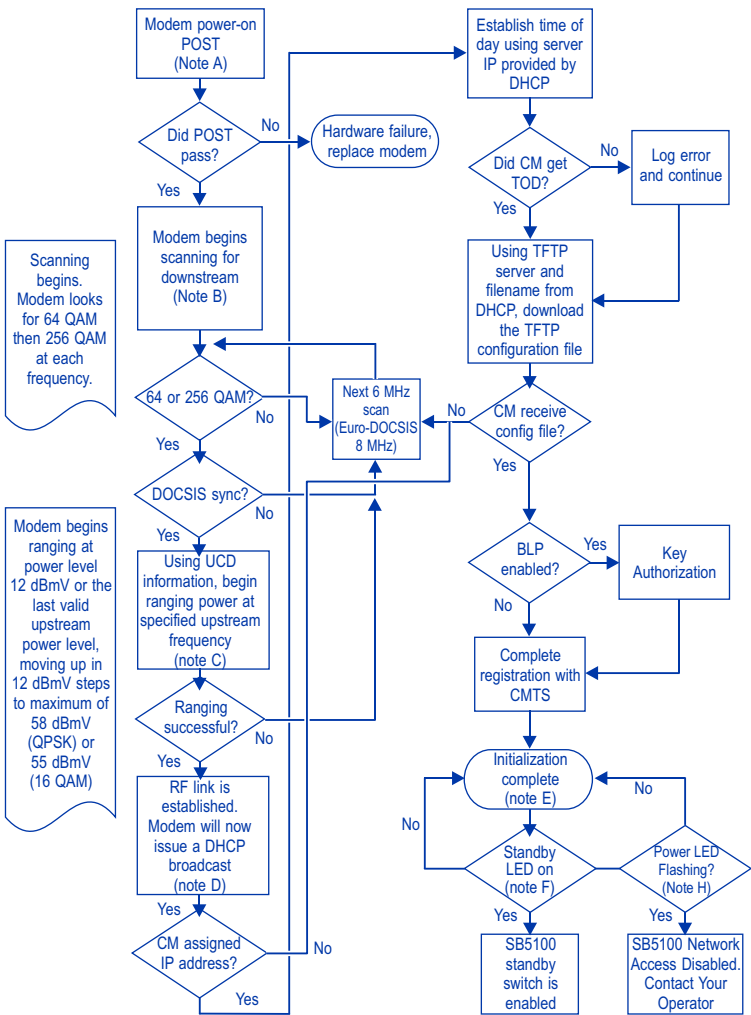
- H** Modem is successfully registered but Network Access Control is disabled via DOCSIS Configuration File.



SURFboard® SB5100 Series Cable Modem LED Status

Notes:	Power	Receive	Send	Online	PC/Activity	Standby	
A							Power On
B							Downstream Scan
C							Upstream Range
D							Network Connect
E							PC/Network Activity
F							Standby
G							Power Off
H							Network Access Off

 -- ON  -- Off  -- Flashing



Modem power-on POST (Note A)

Did POST pass?

Hardware failure, replace modem

Modem begins scanning for downstream (Note B)

64 or 256 QAM?

Next 6 MHz scan (Euro-DOCSIS 8 MHz)

DOCSIS sync?

Using UCD information, begin ranging power at specified upstream frequency (note C)

Ranging successful?

RF link is established. Modem will now issue a DHCP broadcast (note D)

CM assigned IP address?

Establish time of day using server IP provided by DHCP

Did CM get TOD?

Log error and continue

Using TFTP server and filename from DHCP, download the TFTP configuration file

CM receive config file?

BLP enabled?

Key Authorization

Complete registration with CMTS

Initialization complete (note E)

Standby LED on (note F)

SB5100 standby switch is enabled

Power LED Flashing? (Note H)

SB5100 Network Access Disabled. Contact Your Operator