Status Code	Description	Bootloader	STM32 User Code
0x00	No Validation Required(Image is already validated) (Bootloader should write 0x00H to common address After Image is sucessully validated by User code)	Boot Main Firmware.	Don't do validation, continue with running image
0x01	New FW available for upgradation (Usercode should wrirte 0x01H to common address) and Restart	Write 0x03H after successful FW upgradation, Write 0x02H if verification fails. Write 0x06H if file read error.	
0x02	FW validation checks failed,boot loader write 0x02H (Retry Required)	Write 0x03H after successful FW Validation,Write 0x04H if failed after 3 retries, it will initiate the firmware rollback.	
0x03	FW needs to be Validated at Appliation code should write 0x00H and Reset Device.	Boot Main Firmware for Validation.	Validation Success then Write 0x00H at address and RESET. Copy/move firmware files.
0x04	FW validation checks failed. (Rollback Required)	Write 0x03H after successful Rollback. Write 0x02H if it is failed.	
0x05	Bootloader shall do Forced OTA using STM and WiFi binaries images under “/iuBackupFirmware” folder	Bootloader shall perform forceful OTA update using existing FW binaries from backup folder In case partial update of FW binaries, after reboot Bootloader shall check status code value and if it finds it is still 0x05, then do again OTA using “iuBackupFirmware” folder images, as last update was Not successful	STM32 user code shall write 0x05 when Forced OTA Request was initiated from server and Reboot
0x06	File read error (Checksum mismatch), Have to initiate re download	Boot Main Firmware.	Have to initialte file download.
0x07	Files missing	Update the flag to 0x07 and Boot Main Firmware	Files need to be download

Internal Flash Memory Map			
Memory Location		Name	Size
Start Addr	End Addr		
0x8000000	0x800FFFF	Bootloader L1	64KB
0x8010000	0x8035FFF	Bootloader L2	152KB
0x8036000	0x805FFFF	Factory Firmware	168KB
0x8060000	0x80FF7FF	Main Firmware	638KB
0x80FF800	0x80FFFFF	Flags	2KB

GPIO BOOT MODE SELECTION		
PC0	PC1	OTA SELECTION
0	0	Factory Image
0	1	UART Debug mode
1	0	Rollback Firmware(switch to Older Image)
1	1	Main Firmware (Default)

UART DEBUG COMMANDS	
COMMAND	**DESCREPTION**
BMF	Boot Main Firmware
BFF	Boot Factory Firmware
RBM	RollBack Main Firmware
WFL	Write flag
RFL	Read flag
RBT	Reboot
CLF	Clear all flags
BOOT	Exit from UART debug mode
HELP	List all UART commands

CLF is a hidden command which can be used to reset all the flag values to ‘0’