Appendix 3 Added and Changed Functions

The functions added or changed with the CPU module and engineering tool, and the supported CPU modules' firmware version and engineering tool software version are given below.

Firmware version can be checked through the module diagnostics (CPU diagnostics). For the module diagnostics (CPU diagnostics), refer to the following manuals.

📖MELSEC iQ-F FX5S/FX5UJ/FX5U/FX5UC User's Manual (Hardware)

For software version, refer to 📖GX Works3 Operating Manual.

FX5S CPU module

Add/Change Function	Supported CPU module firmware version	Supported engineering tool software version	Reference
FX5S CPU module is supported.	From first production	"1.080J" or later	—
The SFC program instruction is supported.	"1.010" or later	"1.095Z" or later	Page 956 SFC PROGRAM INSTRUCTIONS

FX5UJ CPU module

Add/Change Function	Supported CPU module firmware version	Supported engineering tool software version	Reference
FX5UJ CPU module is supported.	From first production	"1.060N" or later	—
File operation instructions are supported.	"1.030" or later	"1.085P" or later	Page 486 SP.FREAD Page 512 SP.FWRITE Page 535 SP.FDELETE Page 543 SP.FCOPY Page 553 SP.FMOVE Page 563 SP.FRENAME Page 571 SP.FSTATUS
Unicode string data transfer instruction is supported.	"1.030" or later	"1.085P" or later	Page 598 $MOV(P)_WS
Unicode character string to Shift JIS character string convert instruction is supported.	"1.030" or later	"1.085P" or later	Page 628 WS2SJIS(P)
Shift JIS character string to Unicode character string convert instruction (without byte order mark) is supported.	"1.030" or later	"1.085P" or later	Page 631 SJIS2WS(P)
Shift JIS character string to Unicode convert instruction (with byte order mark) is supported.	"1.030" or later	"1.085P" or later	Page 634 SJIS2WSB(P)
The file transfer function instruction is supported.	"1.030" or later	"1.085P" or later	Page 1054 SP.FTPPUT Page 1059 SP.FTPGET
The SFC program instruction is supported.	"1.050" or later	"1.095Z" or later	Page 956 SFC PROGRAM INSTRUCTIONS

FX5U/FX5UC CPU module

Add/Change Function	Supported CPU module firmware version	Supported engineering tool software version	Reference
The ESQRT(P) instruction is supported.	"1.015" and above[1]	"1.015R" and above	Page 720 DESQR(P)/ESQRT(P)
The number of settable high-speed comparison tables was changed from maximum 4 to 32.	"1.015" and above[1]	"1.015R" and above	Page 1100 HIOEN(P) Page 1104 DHIOEN(P)
The number of high-speed comparisons was changed from 4 to 32.	"1.015" and above[1]	"1.015R" and above	Page 1100 HIOEN(P) Page 1104 DHIOEN(P)

Add/Change Function	Supported CPU module firmware version	Supported engineering tool software version	Reference
The high-speed pulse input/output module is supported.	"1.030" and above	"1.025B" and above	Page 809 PWM Page 816 DPWM Page 1100 HIOEN(P) Page 1104 DHIOEN(P) Page 1108 HCMOV(P) Page 1110 DHCMOV(P) Page 1133 POSITIONING INSTRUCTION
The CC-Link IE Field Network intelligent device station is supported.	"1.030" and above	"1.025B" and above	Page 986 NETWORK COMMON INSTRUCTION Page 1085 CC-LINK IE FIELD NETWORK INSTRUCTION
The logging instruction is supported.	"1.040" and above[*2]	"1.030G" and above	Page 945 LOGTRG Page 946 LOGTRGR
The SLMP frame send instruction is supported.	"1.040" and above	"1.030G" and above	Page 1049 SP.SLMPSND
The positioning module instruction is supported.	"1.050" and above	"1.035M" and above	Page 1180 G.ABRST□ Page 1184 GP.PSTRT□ Page 1187 GP.TEACH□ Page 1190 GP.PFWRT Page 1193 GP.PINIT
Reading/writing data instructions.	"1.060" and above	"1.040S" and above	Page 481 S(P).DEVLD Page 483 SP.DEVST
Extended file register operation instruction.	"1.060" and above[*2]	"1.040S" and above	Page 580 ERREAD Page 583 ERWRITE Page 586 ERINIT
Real-time monitor function instruction.	"1.060" and above	"1.040S" and above	Page 947 RTM
Slave station No. (MODBUS address number) that can be set in FX5 master station was changed from 32 to 247.	"1.060" and above	"1.040S" and above	Page 1127 ADPRW
Add U□\G□ to applicable devices of BLKMOV(P) instruction.	"1.060" and above	"1.040S" and above	Page 424 BLKMOVB(P)
FBD/LD language and ST language of step ladder instructions is supported.	—	"1.045X" and above	Page 949 STL, RETSTL
The Ethernet module instruction is supported.	"1.110" and above	"1.050C" and above	Page 1064 GP.OPEN Page 1067 GP.CLOSE Page 1069 GP.SOCRCV Page 1071 GP.SOCSND
Down counting of LC0 to LC34 is supported.	"1.201" and above	"1.060N" and above	Page 774 UDCNTF
The file transfer function instruction is supported.	"1.210" and above	"1.065T" and above	Page 1054 SP.FTPPUT
The CC-Link IE TSN instruction is supported.	"1.210" and above	"1.065T" and above	Page 1073 G(P).UINI
The BL (SFC block device) is supported.	"1.220" and above	"1.070Y" and above	Page 17
The SFC control instruction is supported.	"1.220" and above	"1.070Y" and above	Page 956 LD, LDI, AND, ANI, OR, ORI [S□/BL□\S□] Page 958 LD, LDI, AND, ANI, OR, ORI [BL□] Page 960 MOV(P) [KnS□/BL□\KnS□] Page 963 DMOV(P) [KnS□/BL□\KnS□] Page 966 BMOV(P) [KnS□/BL□\KnS□] Page 970 SET [BL□] Page 971 RST [BL□] Page 976 SET [S□/BL□\S□] Page 978 RST [S□/BL□\S□] Page 980 OUT [S□/BL□\S□] Page 982 ZRST(P) [S□/BL□\S□]
The SFC dedicated instruction is supported.	"1.220" and above	"1.070Y" and above	Page 984 TRAN

Add/Change Function	Supported CPU module firmware version	Supported engineering tool software version	Reference
File operation instructions is supported.	"1.240" and above	"1.075D" and above	Page 486 SP.FREAD Page 512 SP.FWRITE Page 535 SP.FDELETE Page 543 SP.FCOPY Page 553 SP.FMOVE Page 563 SP.FRENAME Page 571 SP.FSTATUS
Unicode string data transfer instruction is supported.	"1.240" and above	"1.075D" and above	Page 598 $MOV(P)_WS
Unicode character string to Shift JIS character string convert instruction is supported.	"1.240" and above	"1.075D" and above	Page 628 WS2SJIS(P)
Shift JIS character string to Unicode character string convert instruction (without byte order mark) is supported.	"1.240" and above	"1.075D" and above	Page 631 SJIS2WS(P)
Shift JIS character string to Unicode convert instruction (with byte order mark) is supported.	"1.240" and above	"1.075D" and above	Page 634 SJIS2WSB(P)
Retrieving FTP client files instruction is supported.	"1.240" and above	"1.075D" and above	Page 1059 SP.FTPGET
The SFC control instruction is supported.	"1.290" and above	"1.095Z" and above	Page 972 PAUSE [BL□] Page 974 RSTART [BL□]

*1 Supported with CPU module serial No. 158**** and above.

*2 Supported with CPU module serial No. 16Y**** and above.