Software Version：EasyBuilder Pro V6.03.02.393

Corrections

EasyBuilder Pro

1. [EBPro] Fixed an issue where compilation may fail when the project contains an erroreous GIF file.

2. [EBPro] Disabled monopoly setting of the default windows in project templates.

3. [EBPro] Fixed an issue where certain project file settings may not be saved correctly.

4. Fixed an issue where system registers that control the Device no Response window are ineffective.

5. [cMT] Fixed an issue where connection cannot be established successfully due to delayed reply to ALTER command by database server when using MariaDB 5.5.

6. [cMT] Fixed an issue where "already installed" message is returned by error when re-installing a printer driver after an unsuccessful attempt.

7. Fixed an issue where macro functions StringInsert and FLOAT2ASCII do not generate proper results.

8. Fixed an issue where certain calculations in macro may not be carried out correctly.

9. [EasyConverter] Fixed potential DLL security vulnerabilities.

10. Fixed an issue where connection to certain Ethernet type PLC by on-line simulation does not work since second try.

Drivers

1. [Modbus] Fixed an issue where setting 0x /1x address range leads to incorrect, shifted data read.

2. [OMRON EtherNet/IP (NJ/NX Series)] Fixed connection issue that occurs after disconnection.

3. [MODBUS] Added 3x_Qword, 4x_Qword addresses for 64-bit application.

4. [BACnet/IP] Fixed an issue where data cannot be accessed after a period of time under communication using COV mode.

5. [Schneider SoMachine M Series (Ethernet)] Added support for communication with M241 firmware v5 or later (PLC software used: Machine Expert).

6. [CODESYS V2 (Symbolic Addressing)] Added support for bit access of Word data

type.

7. [Delta AS300 MODBUS RTU/ASCII][Delta AS300 MODBUS TCP/IP] Added L and L_Bit addresses.

8. [Schneider MODBUS TCP/IP] Added %TM_V, %TM_P, %TM_Q, and %X addresses.

9. Siemens S7-1200/1500 Series: Added support for importing .ap15_1, .ap16 files. (TIA Portal V15.1, V16)

10. [Beckhoff TwinCAT PLC – Free Tag Names (Ethernet)] Fixed an issue where compilation error may occur due to incorrect parsing of address tags.

11. [Beckhoff TwinCAT PLC – Free Tag Names (Ethernet)] Fixed an issue where incorrect value may be obtained from address tags using Modbus TCP/IP Gateway.

12. [Beckhoff TwinCAT PLC – Free Tag Names (Ethernet)] Fixed an issue where String arrays cannot be read correctly.

13. [XINJE XD Series (Ethernet)] Added new driver.

14. [CODESYS V3 (Ethernet)] Fixed an issue where data types: LINT, ULINT, LREAL cannot be accessed properly.

15. [EMERSON ROC800 Series – Free Tag Names] Fixed get tag and read issues with bit address tags.

16. [KEYENCE KV-L20V/700/1000/3000/5000/7500/8000/Nano Series] [KEYENCE KV-L20V/700/1000/3000/5000/7500/8000/Nano Series (Ethernet)] Expanded R、R_word、FM、FM_Bit address ranges.

Software Version：EasyBuilder Pro V6.03.02.294

Corrections

EasyBuilder Pro

1. **[Macro]** Fixed an issue where RAND function does not output properly.

2. Fixed an issue where preloading fonts can make the program unable to start properly.

3. Fixed an issue where Modbus Server cannot read PLC data correctly.

4. Fixed an issue where device IP related system registers are incorrect when using Modbus Server (Ethernet interface).

5. (iE/XE/eMT) **[Event Display]** Fixed an issue where the incorrect elapsed time is displayed.

6. Fixed an issue where minor position adjustment of multiple selected objects using the arrow keys is impossible.

7. **[Data Transfer (Per-page)]** Fixed an issue where "0 is short of space" message shows when opening the settings window of this object.

8. **[Macro]** Fixed a number of compilation issues.

cMT Viewer

1. Fixed an issue where cMT viewer cannot connect to the device whose project file was compiled and downloaded using an earlier version of EasyBuilder Pro.

Software Version: EasyBuilder Pro V6.03.02.257

Supported Models

1. Added support for cMT-CTRL01.

New Features

EasyBuilder Pro

1. Added support window layers, a way of organizing objects in a window. Having added layers to a window, objects can be placed within different layers as appropriate. Objects in selected layers can be displayed while those in other layers are invisible, which shall greatly facilitates the screen design process.
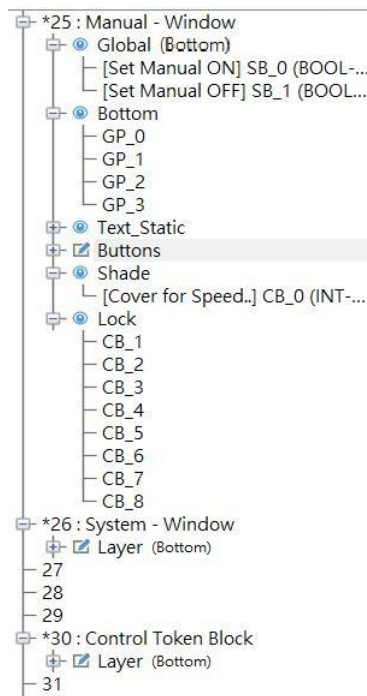
Window 25 in the screenshot above has six layers: Global, Bottom, Text_Static, Buttons, Shade, and Lock.

2. Expanded system picture library. New libraries include generic icons across multiple themes, industrial buttons and switches, P&ID symbols……etc. See appendix 1 in this document for the new icons.

3. Added "Apply" button to the object property settings window. This button allows saving of the settings without having to close the window.

4. Added support for search function and the use of hashtag for the picture libraries in the Browse Libraries interface.
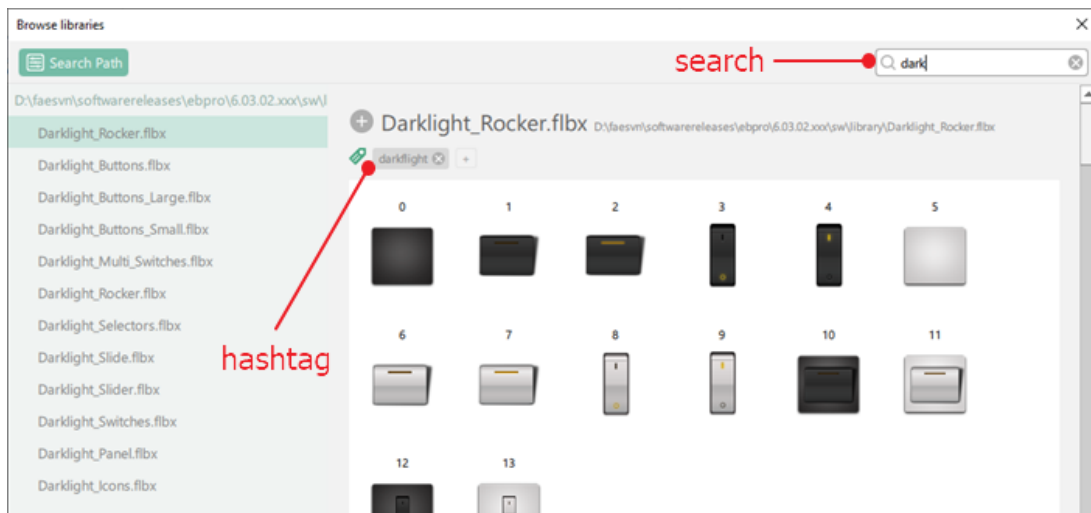
5. Added [Duplicate to Every State], [Duplicate to Every Language], and [Duplicate to Every State and Language] shortcut buttons into text settings in Home tab which can be used to duplicate the current text settings of the selected object to its other states or languages.

6. Moved settings relating to Recipe Database to the Data / History tab.

cMT Series

All features listed in this section is available exclusively for cMT series only.

1. Added support for 64-bit data type.

2. Added **[BACnet Schedule]** object. This feature is only applicable when using the [*BACnet/IP*] driver and it helps visualize and access schedule data in BACnet controller with a graphical UI.
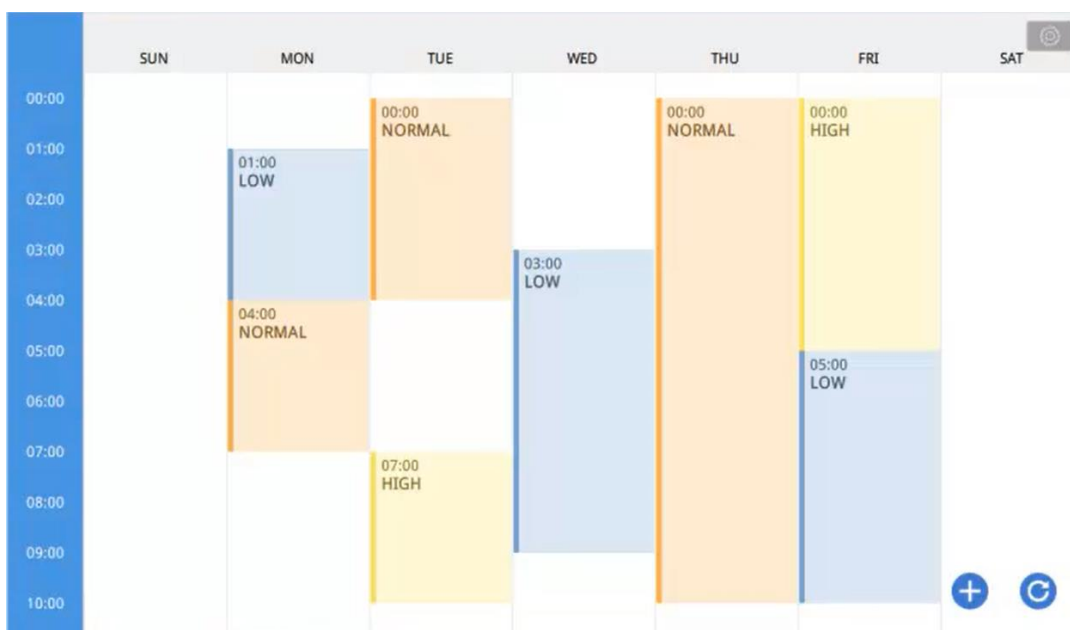
BACnet Schedule object as seen on HMI screen

3. **[Recipe View]** Made whether or not to display specific columns configurable.

4. **[MQTT]** Added support for Google Cloud IoT Core.

5. **[MQTT]** Added support for using nested structure for Topic Subscriber under JSON (Advanced) mode.

6. **[MQTT]** Added support for automatically building data structure using JSON template under JSON (Advanced) mode.

7. **[Backup (per page)] [Backup (global)]** Added support for using SQL Query as data source.

8. **[Picture Viewer]** Added support for playing GIF-format images.

9. **[Option List]** Added row height setting.

10. **[Alarm Bar] [Alarm Display] [Event Display] [Event Bar Chart]** Added dynamic category range setting.

11. **[Action Trigger][Combo Button]** Added [Write constant string] option for Set Word action.

12. **[Action Trigger][Combo Button]** Added [File Transfer (FTP)] action.

13. **[Function key]** Added line feed option for keyboard input.

14. **[File Browser]** Added [Select] command.

15. **[System Parameter Setting]** Added [Trigger release actions anyway if touch moves out of the button] option.

16. Added system register LB-12665 : open USB/SD card download/upload dialog.

17. Added the following system registers relating to Wi-Fi hotspot feature:

    LB-12666 : Disable/enable Wi-Fi Hotspot
    LB-12667 : Refresh Wi-Fi Hotspot setting
    LW-12006 (16 words) : Wi-Fi Hotspot SSID
    LW-12022 (32 words) : Wi-Fi Hotspot password

Utility Manager

1. Added cMT Diagnoser. This tool can be used to access the data of HMI (cMT Series models, including Gateway models) and the PLC it's connected to, the communication status and details between HMI and PLC, and the communication status between HMI and MQTT Server.
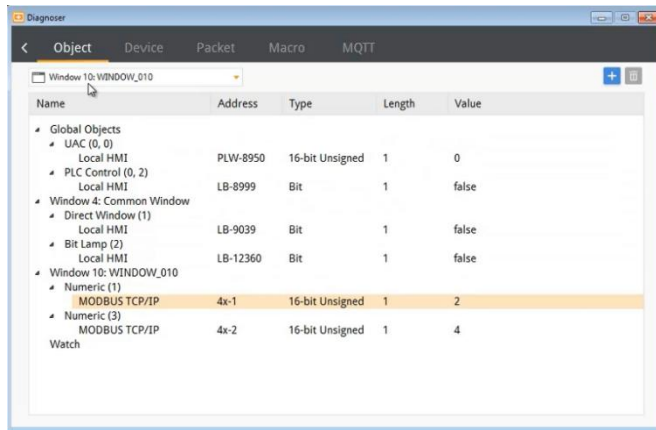
View data
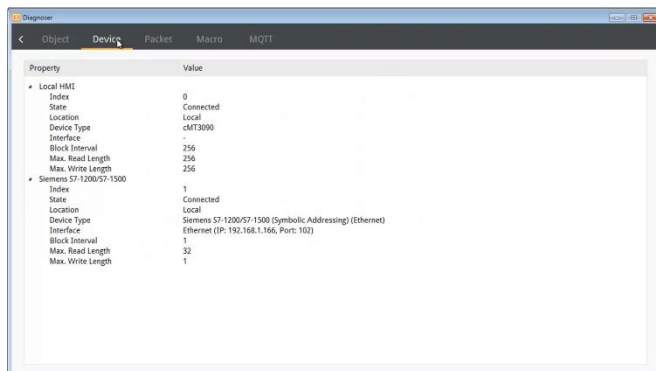
View communication status with PLC
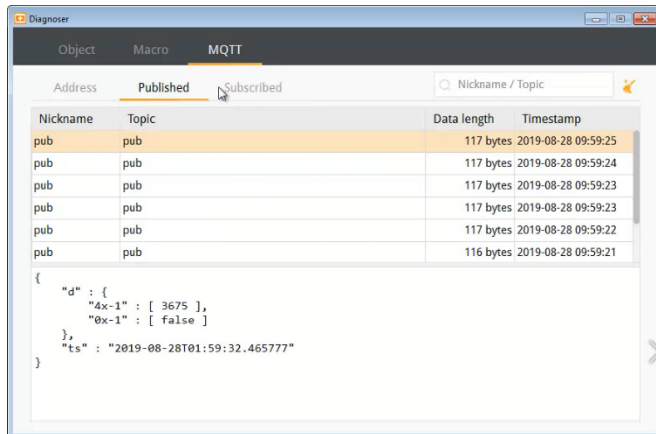
View communication status with MQTT server.

Drivers

1. Added support for 64-bit data type for the following PLC series:

   [MODBUS]
   [Rockwell CompactLogix/ControlLogix/Micro850]
   [OMRON EtherNet/IP NJ/NX]
   [OPTO22 CONT Protocol]

[EMERSON ControlWave]
[CODESYS V2/V3]
[Schneider SoMachine M]
[Beckhoff TwinCAT]

As noted above, 64-bit data type is available only for cMT series. It is not available for iE, iP, eMT, XE and mTV series.

Appendix 1: EasyBuilder Pro 6.03.02 new system picture libraries

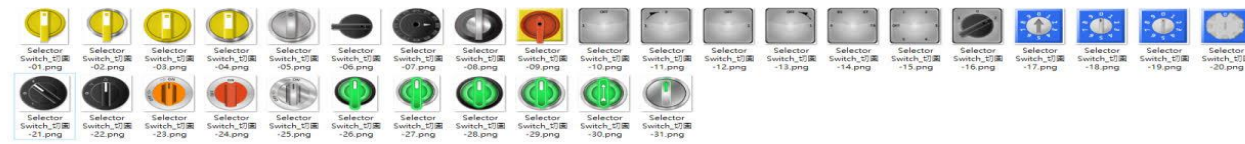| #	Database	Alarm	Arrow	Communication	Link / Share	Cloud	Settings	File / Folder	Shape	Logistics
1	Stack	Error	AngleUp	edit	Multiple	DownloadFromCloud	Settings	Document	Round	Support
2	Stack Recovery	Stop	AngleDown	comment-dots	Single	UploadToCloud	Setting Error	View	Oval	Feedback
3	Datasheet	Shutdown	AngleLeft	comments	CloudShare	SyncCloud	Setting Issue	Library	Triangle	Destination
4	Data Backup	Radio	AngleRight	wifi	CloudSearch	UploadSuccess	Setting Caution	Archive	Isosceles triangle	Geolocation
5	Data Import	Non-Displayable	AngleDoubleUp	paper-plane	ArchiveIssue	UploadError	Setting Instrument	File	Square	Compass
6	Data Export	Lock	AngleDoubleDown	network-wired	Firewall	SearchCloud	Setting Complete	File-Archive	Rectangle	Calendar
7	Data Sharing	Unlock	AngleDoubleLeft	bell-slash	GlobalServer	CloudSecurity	Tool Box	File-Audio	Pentagon	AirFreight
8	File	Danger	AngleDoubleRight	bell	Contribution	CloudComputing	Slider Left	File-Code	Hexagon	CargoBarge
9	Security	Bell	Up	envelope	Batch	CloudHosting 1	Slider Right	File-Excel	Octagon	CargoTrain
10	Storage	Light	Down	envelope-open	PeertoPeer	CloudHosting 2	Time Setting	File-Txt	Star	WorldwideShipping
11	Concurrency Control	Danger_Flammable	Left	news	EthernetPort	CloudServices	Date Setting	File-Image	Decagram	Delivery
12	Sync	warning_Poison	Right	users	EthernetCable	CloudDrive	User Setting	File-Pdf	Icosagram	FastDelivery
13	MySQL	Question/issue	CircleUp	user group1	Group	CloudNetwork	Image Setting	File-Powerpoint	Variation	Delivered
14	SQL	caution	CircleDown	user group2	Seam	CloudStorage	Windows Setting	File-Video	Shield	DeliverycanCelled
15	Microsoft Azure	Activation key	CircleLeft	user group3	Dispersion	LinkCopy	File Setting	File-Word	Cross mark	Container
16	IBM Bluemix	Electric Shock	CircleRight	rss feed	Set	LinkShare1	Transparency Setting	Folder	Check mark	Checklist
17	Amazon Web Services	Breakdown	SquareUp	router	Sharing	LinkShare2	Archive File Setting	Folder-Open	Circle mark	Weight
18	Online Spreadsheets	Fix	SquareDown	device connection1	Upload	Delete	Transfer	Save	Triangle mark	Dimension
19	Create Database	Low Battery	SquareLeft	device connection2	Download	Lock	Collection	Sticky-Note	Square mark	TimeTracking
20	Database User	Biohazard	SquareRight	device connection3	External	CloudSetting	Divergence	Create Document	Water drop	Barcode
21	Permission Management	Chemical	FromTop	device connection4	Internal	OtherSetting	Sync Setting	Upload-Document	Moon	DeliveryScheduled
22	Version Control	Pinch Point_Hand	FromButtom	device connection5	Pin	BigData	Mixer	Classification	Cloud	Tracking
23	Quantization	Explosion	FromLeft	device connection6	ArchiveFile	CloudConnection	Code Setting	Trash Folder	Sun	ParcelIn
24	System Automation	Gas	FromRight	cloud upload	Exchange	GlobalNetwork	Encrypt	Upload-Folder	Bookmark	ParcelOut
25	Search Database	Geothermal	ToTop	cloud download	Link	SiteRecovery	Folder Setting	Block Folder	Heart	Breakage
26	Database Filter	Havey	ToButtom	wifi cloud	Unlink	ContentDeliveryNetwork	Filter	Lock Folder	Spade	ShelfCapacity
27	Database Admin	LaserHazard	ToLeft	wifi HMI	Attach	SyncingWithMobile	Comment	Unlock Folder	Club	Warehouse
28	Local Network	Magnetism	ToRight	wifi device	Information	CloudAlert	More Tools	Sync Folder	Diamond	WarehouseManagement
29	Server Error	Radioactive	RotateLeft		At		Find Tools	Alert Folder	Hand	ContainerCrane
30	Scheduled Maintenance	Snow	RotateRight		Bluetooth		Custom Tool bar	Corrupted File	Pentagon_round corner	Discrepancy
31		UV	LoopRotation		Connecting		Crop Marks	Approve File	Square_round corner	DistributionCenter
32		Alarm	LoopRotation2		Cycle		Index	Keypad	Triangle_round corne	OverflowShipment
33		Bell	TurnUP		Part		Help Center	Add File	Rectangle_round corne	
34		Timer	TurnDown		Proportion		Custom Color	Move Out	Flower	
35		Corrosive_Hand	TurnLeft		Junction		Tag	Move In	Paralelogram	
36		High Noise Area	TurnRight		JunctionLock		Internet Setting	Find Files	Trapezoid	
37			4WayExpand					Favourite		
38			4WayCompress					Data Transmission		
39			2WayExpand					File Hyperlink		
40			2WayCompress					Basic Settings		
41			2WayArrowH					Privacy Settings		
42			2WayArrowV					Folder Info		
43			DoubleArrowH					File Info		
44			DoubleArrowV					Create-Shortcuts		
45			TriangleUP					Access Right		
46			TriangleDown					Shared Folder		
47			TriangleLeft					Access Failure Error		
48			TriangleRight					Unknown File		

#	Audio / video	SD Card / USB	Upload / Download	Credential / Password	Keyboard / call icon	Barcode	QR Code	Address / Edit	Email	Notification
	icon name	icon name	icon name	icon name	icon name	icon name	icon name	icon name	icon name	icon name
1	Play	SDCardBlank	UploadArrow	Portrait	Keyboard	Barcode1	QRCode	AddressLabel	Mail	Dot
2	Stop	CapacityGB	UploadArrow	PortraitRecognition	KeyboardExpand	Barcode2	Focus	AddressTagLibrary	OpenMail	WindowsNotification
3	Pause	NameSD	UploadBox	PortraitRecognitionIsUnknown	KeyboardCollapse	Barcode3	Confirm	AddressTypeWord	Letter	RectangularDialogBox
4	Backward	SDCardWIFI	DatabaseUpload	PortraitRecognitionScanSucceeded	WifiKeyboard	BarcodeScanner1	Error	AddressTypeBit	Reply	SquareDialogBox
5	FastBackward	SDCardLock	ServerUpload	PortraitRecognitionScanUnsucceeded	KeypadLock	BarcodeScanner2	Unknown	AddressFormat	ReplyAll	OvalDialogBox
6	Forward	SDCardDropOut	ProjectUpload	IdentityCredential	NumericKeypad	BarcodeScanner3	Restart	UserCreToFormatExportCSV	Forward	CircularDialogBox
7	FastForward	SDCardUnread	PacketUpload	IdentityConfirmedSuccess	NumericKeypadExpand	BarcodePrinter	Search	UserDefinedTags	Send	WordDialogBox
8	StepBackward	SDCardRead	FolderUpload	IdentityConfirmedUnsuccess	NumericKeypadCollapse	BarcodeScanUnsucceeded	Scanning	SystemTags	SendAll	IssueDialogBox
9	StepForward	SDCardDisable	FileUpload	PasswordInput	Delet	ScanSucceeded	ScanBox	AddsAddressTag	Receive	StopDialogBox
10	Restarted	SDCardWarning	PictureUpload	PasswordCertificate	Enter	NoThisBarcode	Scanner	AddressTagSettings	SendAndReceive	CautionDialogBox
11	Undo	SDCardSearch	CloudUpload	PasswordSuccessful	Shift	Search	PackageQRCode	Classification	CancelSendAndReception	BellDot
12	Redo	SDCardProtected	HMIUpload	PasswordUnsuccessful	Windows	BarcodeSetting	CloudQRCode	Search	MailConfirmation	Megaphone
13	Repeat	External SD Card	UploadSetting	PasswordProtection	Numericinput	KeyInNumber	MobileScanning	Delete	MailDeletion	MobileText
14	Random	SDCardFormat	UploadRun	Password	Input	CountingList	ComputerScanning	Export CSV	MailSharing	GroupNotification
15	Expand	MicroSDCard	Uploadsuccessful	FingerprintRecognition	SquareRoot	Report		Import CSV	MailEncryption	CalendarDot
16	Compress	USBIconV	UploadStop	FingerprintRecognitionSuccessful	Square	P/N		Export EXCEL	Spam	FAQ
17	Compress	USBIconH	UploadTimeOut	FingerprintRecognitionUnsuccessful	OneX	L/N		Import EXCEL	Reorganize	DataReporting
18	Expand	USBDisk	UploadUnsuccessful	RecognitionIris	IsDividedBy	ID/C		Address	AddMail	HMIReporting
19	VideoFile	USBDisk2	DownloadArrow	RecognitionIrisSucceeded	IsMultipliedBy	BOM		Macro Subroutine	Edit	PLCReporting
20	AudioFile	USBWiFi Dongle	DownloadArrow	RecognitionIrisUnsucceeded	Minus	PO		ReadWriteConvertion	ShippingBackup	WaterStage
21	Video	USBLock	DownloadBox	ComputerPasswordCredential	Plus	MO		ObjectInformation	AttachmentLetter	Temperature
22	VideoClose	USBDropOut	DatabaseDownload	HMIPasswordCredential	Arrowkeypad	QTY		HMI Address	Search	Pressure
23	Microphone	USBSearch	ServerDownload	MobilePasswordCredential	ArrowUp	NG		PLC Address	LetterMovedTo	Equipment
24	MicrophoneMute	USBProtected	ProjectDownload	DatabasePasswordCredential	ArrowDown	LRR		Source Address	MarkedUnread	Manipulators
25	VolumeUp	USBHardware	PacketDownload	ManualPasswordEntry	ArrowLeft	RMA		Destination Address	Annex	PilotLamp
26	VolumeDown	DropOut	FolderDownload	GraphicRecognition	ArrowRight			IP Address SettingsIP	Annex	Maintenance
27	VolumeOff	USBCable	FileDownload	Key	StarKey			Address Mapping Tables	At	Occupied
28	VolumeMute	USBConnection	PictureDownload	KeyCredential	PoundKey			Easy Address Viewer	Inbox	Warning
29	WebCam	USBDisable	CloudDownload	Password	Microphone			AddressValues	Seal	Event
30	WebCamClose	USBWarning	HMIDownload	UnlockedSuccessfully	MicrophoneMute				Trash	Broadcast
31	Hheadphones	USBProhibited	DownloadSetting	SuccessfulCertification	Video				Tag	TrafficVolume
32	Music	USB 3.0	DownloadRun	AuthenticationFailed	VideoClose					InternetSpeed
33	Film	USBMicro	Downloadsuccessful							NotConnected
34		USBMini	DownloadStop							FullCapacity
35		USBTypeA	DownloadTimeOut							Cancel
36			DownloadUnsuccessful							Subscription
37			CloudUploadDownload							
38			UploadDownload							
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46										
47										
48										

Button Switch

Selector Switch

Toggle Switch

Key Lock Switch   **DIP Switch**   **Slide Switch**

Rocker Switch   **Magnetic Switch**

Nameplates

Valve