

Title	Active	Abstract	Contacts	Version	Status	Status Date	Implemented	IOP tested	Certification	Key Words
Generic Device Models (Controller, Field Device, Process Device)										
OPC Foundation: UA for Devices (DI)	Y	generic representation of devices, e.g. Field devices, controllers, robots, machine tools	Matthias Damm, chair	V1.00	Released	Dec-09				physical device, software component, functional grouping
				V1.01	Released	Jul-12				
				V1.02	Release Candidate	Jan-19				
OPC Foundation: Analyzer Devices (ADI)		A unified view of analysers irrespective of the underlying device protocols. Analyser devices are comprised of one or more analyser channels with a single address space which has its own configuration, status and control. Examples: Particle Size Monitor, Acoustic Spectrometer, Gas Chromatograph	<AskOPC>	V1.00	Released	Oct-09				
UA for 61131-3 (PLCopen)	Y	Control program, tasks, controller variables, structured data, function blocks	Stefan Hoppe, chair	V1.00	Released	March-10				PLC, Controller, Automation
UA Client FunctionBlocks (PLCopen)	Y	PLC controller initiates UA communication. Controller-Controller, Controller-MES, ...		V1.01	In work					
				V1.00	Released	Apr-14				
UA for Autold Devices (Autold)		Identification device executing a scan, read or write process. Comprises barcode, OCR, 2D code, RFID, NFC, RTLS, sensors and mobile computing	info@AIM-D.de	V1.00	Released	Apr-16				
UA for Process Devices (FCG PA-DIM)	Y	Specify and maintain OPC UA Information Models for Process Automation Devices initially based on NAMUR Core Parameters according to NE 131 including assignment of semantic identifiers according the IEC Common Data dictionary and/or eCI@ss. Device information can be provided to the enterprise level, e.g. for diagnostics, configuration, condition monitoring, visualization, maintenance etc	Achim Laubenstein	V1.00	In work					Process Devices
Oil & Gas										
MCS and DCS (MDIS)		An Oil and Gas standard for interfacing the Subsea Production Control System (SPCS) with a Master Control Station (MCS) or a Subsea Gateway to the Distributed Control System (DCS).	Paul Hunkar	V1.0	Released	Jan-17				
				V1.1	Released	Oct-17				
				V1.2	Released	Oct-18				
Energetics ProdML	Y	Energetics governs and manages standards for Oil & Gas information (drilling – WITSML, producing – PRODML) which define a standardized XML data exchange format. The OPC UA mapping will allow exchanging WITSML & PRODML information between Oil & Gas drilling systems and Oil & Gas	Jay Hollingsworth	V1.00	In work					
Energetics WitsML	Y			V1.00	In work					
Manufacturing Devices, Robots, Machines, Machine Tools										
UA for MTConnect	Y	Exposes the MTConnect data standard providing connectivity with many popular SCADA and other software products on the factory floor and to the cloud. Data sources include things like production equipment, sensor packages, and other hardware.	listed here	V1.00	Released	Nov-13				
				V1.01	Stable draft					
UA for CNC systems		Focus is on data that is situated within the CNC kernel but not within the PLC of a CNC system. This results from the main objective to standardize an interface that provides and enables the access to clearly defined raw data. Hence, this addresses applications like ULs, PDA/MDA systems, diagnosis and monitoring applications, but not necessarily MES or ERP systems as the two latter ones mostly need summarized data. VDMA 40500-2	Götz Görlich	V1.00	Released	Jul-17				VDMA, Automation, machine tool
Universal Machine Tool Interface (umati)	Y	Purpose is to develop an OPC UA Information Model for a universal communication interface of machine tools towards "external" communication partners, e.g. MES, ERP, cloud, automation system etc. / The implicit and explicit information model specified by umati JWG will be defined into an UA companion specification using OPC UA constructs for the purpose of exposing "machine tool information" to OPC UA applications both inside and outside the production environment. VDMA 40500-1	Götz Görlich	V1.00	KickOff Feb 22, 2019					VDMA, Automation, machine tool
Plastics and rubber machinery (Euromap)		Euromap83: General information regarding plastics and rubber machines. The intention is that ObjectTypes which can be used for several machines and applications are defined only once. For specific applications (e.g. connection of injection moulding machines to MES), it is extended by specific Companion Specifications (e.g. EUROMAP 77). Euromap 77: Data exchange between injection moulding machines (IMM) and MES Manufacturing execution systems (MES) are used for collecting the information generated by IMM at a central point for easier quality assurance and job and dataset management.		V1.01	Released	Jan-19				VDMA, Automation
				V1.00a	Released	Jan-19				VDMA, Automation
		Euromap 82.1: interface for temperature control devices (TCD) for data exchange via OPC UA	Harald Weber Marc Schmitt	V1.00	Released	Jan-19				VDMA, Automation
		Euromap 82.2: interface between injection moulding machines (IMM) and hot runner devices (HRD) for data exchange via OPC UA.		RC 1.00.1	Release Candidate	Oct-18				VDMA, Automation
		Euromap 82.3: interface between injection moulding machines (IMM) and liquid silicone rubber (LSR) dosing systems for data exchange via OPC UA.		RC 1.00.1	Release Candidate	Oct-18				VDMA, Automation
		Euromap 84 series provides OPC UA information models for extrusion. The different parts describe the extrusion line as a whole, and the different components.		RC 1.00.1	Release Candidate	Oct-18				VDMA, Automation
Machine Vision	Y	Aims at straightforward integration of machine vision systems into production control and IT systems. The OPC UA Vision interface exchanges information between a machine vision system and another machine vision system, a machine PLC, a line PLC, or any software system at the control device level accessing the machine vision system.	Andreas Faath	V1.00	Stable draft					VDMA, Automation
Robotics	Y	Develop an OPC UA information model for the robotics communication. Robotics stands for a complete motion device system that includes a list of motion devices. Includes for example industry robots (stationary), mobile robots (also with several robot arms), robots with several control units, service robots and many more. Scope of Part 1 to push out condition data of a motion device system vertically into higher level manufacturing systems (line PLC, MES; Cloud) for information and diagnostic purposes. Subsequent parts will cover other use cases, e.g. to configure and control a motion device system or the included motion devices.	Andreas Faath	V1.00	Stable draft					VDMA, Automation
Weighing	Y	Develop an OPC UA information model for the communication of weighing systems. Main scope is to transport condition data of a weighing instruments vertically into higher level manufacturing systems (MES; etc.) for information and diagnostic purposes and to set information parameters regarding the weighing process (e.g. tare weight, offsets).	Dirk Bösel	V1.00	In work					VDMA, Automation
End-of-arm Tools		Information models for different End-of-Arm Tools (EOAT). Examples for these End-of-Arm Tools are grippers, screwdrivers, welding machines and exchange units. These tools can be used in conjunction with a robot or independently. Asset Management, Condition Monitoring, Configuration	Etienne Axmann	V1.00	Kick-Off	Jan-2019				VDMA, Automation
High Pressure Die Casting		Information model for the communication between devices of a "High Pressure Die Casting Production Cell" and between the devices and systems outside of the production cell (e.g. MES or ERP software systems).	Kai Kerber	V1.00	Kick-Off	Jan-2019				VDMA, Automation
Powertrain	Y	Powertrain stands for a drive system that includes the motor starter, complete drive module (CDM), electric motor and transmission elements. The CDM includes for example a frequency converter with all additional components like electrical infeed, input and output filter etc. Powertrains can be used in various industrial applications. Everything that has to be moved, turned, lifted or positioned can be converted with drive technology.	Tobias Hitzel	V1.00	In work					VDMA, Automation

