Design Services Partner Profile

AMD **XILINX**

IMST GmbH Company Overview

www.imst.de

Partner Details		
Partner Tier:	Select Certified	
Headquarters Location:	Carl-Friedrich-Gauss-Str. 2-4,Kamp-Lintfort,,Germany	
Xilinx Alliance Partner Since:	6/20/2018	

Key Contact Info
Daniel Martini
martini@imst.de

Regions Served
Western Europe

Supported Product Types				
Yes	Design Services		No	Embedded Products
No	IP		No	EDA Tools
No	Boards			

Engineering Service Types		
Yes	General Purpose Services	Preferred
No	Services in Support of Products Sold	
Yes	Services Leading to Contract Manufacturing	
Maximum Service Scope:	Turnkey / full product design	

Engagement Models Supported		
Yes	SOW-Based Fixed Bid Projects	Preferred
Yes	Time and Materials	
At my location	Captive Resources at Partner or Customer Premises	

Xilinx Design Tool Experience			
Yes	Vivado	No	SDSoC
No	HLx	No	SDAccel

Industry Certifications Achieved   ISO 9001

Industry Certification Services Offered   CE

Government Clearances

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IMST GmbH Segment and Application Focus

Primary Focus	**Defense/Aerospace**	No Focus	Homeland Security
		No Focus	Electronic Warfare
		No Focus	ISR
		Primary Focus	Space
		No Focus	Missiles & Munitions
		No Focus	Military Avionics
		No Focus	Commercial Avionics
		Primary Focus	SatComm
		No Focus	Wireless Milcom
		No Focus	Other A&D

No Focus	**Audio, Video, Broadcast**	No Focus	Encoders & Decoders
		No Focus	Monitors & Projection
		No Focus	Networking & Converters
		No Focus	Audio Systems
		No Focus	Video Processing Cards
		No Focus	Video Conferencing
		No Focus	Routers and Switches
		No Focus	Pro Cameras & Camcorders
		No Focus	Other Broadcast

Secondary Focus	**Automotive & Transport**	No Focus	Driver Assist - Camera
		Secondary Focus	Driver Assist Radar/LIDAR
		Secondary Focus	Driver Info/Infotainment
		Secondary Focus	Automated Driving
		Secondary Focus	Other Automotive

No Focus	**Consumer**	No Focus	Digital Display
		No Focus	Drones
		No Focus	Multifunction Printers
		No Focus	Other Consumer

No Focus	**Datacenter**	No Focus	Storage
		No Focus	Compute
		No Focus	Networking

Secondary Focus	**Industrial, Medical**	No Focus	Motor Control
		Secondary Focus	Industrial Networking
		No Focus	Surveillance
		No Focus	Machine Vision
		No Focus	Medical Imaging
		No Focus	Medical / Clinical
		Primary Focus	Other ISM

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IMST GmbH Segment and Application Focus (continued)

Primary Focus	**Test & Measurement**	Primary Focus	Simulation / Emulation
		No Focus	T & M Instrumentation
		No Focus	Semiconductor Test
		Secondary Focus	Wired Communication Test
		Primary Focus	Wireless Communications Test
		Secondary Focus	Other Test & Measurement

No Focus	**Wired Comms & Networks**	No Focus	Access Equipment
		No Focus	Long Haul/Transport
		No Focus	Wired Mobile Backhaul
		No Focus	OTN
		No Focus	Enterprise Equipment
		No Focus	Ethernet Interlaken Connectivity
		No Focus	Packet Processing
		No Focus	Other Wired Communications

Primary Focus	**Wireless Comms & Networks**	Primary Focus	Baseband
		No Focus	Wireless Backhaul
		No Focus	Connectivity & Switching
		Primary Focus	Radio
		Secondary Focus	Other Wireless

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Design Competencies

System Architecture	Primary Focus	Model based system design & simulation for complex radio communication and radar systems (Sysml)
RF and Analog Design	Primary Focus	System design, circuit design, layout & testing of analog and digital RF frontends including cross-domain optimization (AGC automatic gain control)
FPGA Design and Integration	Primary Focus	Many years of experience in design and integration of signal processing algorithms for communication and radar systems (e.g. modulation, synchronization, equalization, filter, Up and Down Converter, interleaver, channel codin
FPGA Timing Closure	Secondary Focus	Experience in timing optimization to reach timing constraints.
FPGA Design Optimization	Secondary Focus	Experience in Design optimization to reach resource constraints.
Signal Integrity Design and Analysis	Secondary Focus	Tools for measurement of signal integrity up to 6GHz are available in house. These tools are regularly used during the design process. Signal integrity simulation with own EM simulation tool EMPIRE XPU or third party tools.
Inhouse or Subcontracted: Typical Serial Speed:	Inhouse	
PCB Design & Layout	Primary Focus	Complete circuit design service for analog (RF) and digital circuits. Experience in RF circuit design up to 77 GHz carrier frequency, as well as in digital PCB design including multilayer PCBs with up 2000 components.
Inhouse or Subcontracted:	Inhouse	
Industrial and Mechanical Design	Secondary Focus	Experience in PCB integration into mechanical design including necessary tool chain.
Inhouse or Subcontracted:	Subcontracted	
Industry Certification and Compliance Testing	Primary Focus	In-House accredited Test Center with comprehensive testing and consulting services for electromagnetic compatibility (EMC) and radio spectrum matters (ERM), specific absorption rate (SAR), and LoRaWAN testing.
Inhouse or Subcontracted:	Inhouse	
Quality and Reliability Testing	Primary Focus	Radio performance testing in terms of bit error rates (BER), packet error rates (PER), and interference analysis of single links and radio networks.
Inhouse or Subcontracted:	Inhouse	
Contract Manufacturing	Secondary Focus	Long lasting experience in cooperating with manufactures. Several projects are realized per year. IMST works with different manufacturers to meet the respective customer requirements.
Inhouse or Subcontracted:	Subcontracted	
Max Quantities Supported:		
Digital Signal Processing	Primary Focus	Algorithm design and simulation for radio communication and radar systems (synchronization, channel coding, (de-)modulation, equalization, interleaving, etc.)
Experience:		
Embedded Processors	Primary Focus	Experience with embedded Linux systems based on ARM

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Experience:	ARM V7 and V8 device family	processor, cross compilation, driver development, Zynq/ZynqMP architectures
Embedded Porting / BSP Extension	Secondary Focus	Custom board development with DDR memory implementation and BSP adaptions including fine tuning of DDR read/write timings
OS and RTOS Design Experience:	FreeRTOS, Linux, Ubuntu Linux	
Embedded Application Development	Secondary Focus	Experience in embeded linux development to control and maintain radio and radar systems.
Image Sensor Fusion	No Focus	
Homo or Heterogeneous:	None	
Sensor Types Design Experience:		
Computer Vision	No Focus	
Machine Learning	No Focus	
Framework Experience:		
Network Model Experience:		