



MRI Acronyms

Vendor MRI Acronyms

	Siemens	GE
Sequence Type		
Spin Echo	SE	SE
Gradient Echo	GRE	GRE
Spoiled Gradient Echo	FLASH	SPGR
Coherent Gradient Echo	FISP	GRASS
Steady-State Free Precession	PSIF	SSFP
True FISP	TrueFISP	FIESTA
True FISP/Dual Excitation	CISS	FIESTA-C
Double Echo Steady State	DESS	–
Multi-Echo Data Image Combination	MEDIC	MERGE
Ultrafast Gradient Echo	TurboFLASH	Fast GRE, Fast SPGR
Ultrafast Gradient Echo 3D	MPRAGE	3D FGRE, 3D Fast SPGR
Volume Interpolated GRE	VIBE	LAVA-XV
Body Diffusion	REVEAL	
Susceptibility-Weighted Imaging	SWI	(SWAN)
Dynamic MRA with k-space Manipulation	TWIST	TRICKS-XV
High-Resolution Bilateral Breast Imaging	VIEWS	VIBRANT-XV
Non-contrast MR Angio, TSE-based	NATIVE-SPACE	–
Non-contrast MR Angio, TrueFISP-based	NATIVE-TrueFISP	Inhance Inflow IR
Parametric Mapping	MapIT	CartiGram
Inversion Recovery	IR, Turbo IR (TIR)	IR, MPRIR, FastIR
Short Tau IR	STIR	STIR
Long Tau IR	Turbo Dark Fluid	FLAIR
True IR	True IR	–
Turbo Spin Echo/Fast Spin Echo	TSE (Turbo Spin Echo)	FSE (Fast Spin Echo)
Single-Shot TSE/FSE	HASTE	Single-Shot FSE
FSE/TSE with 90° Flip-Back Pulse	RESTORE	Fast Recovery FSE (FRFSE)
Hyper Echoes	Hyperecho	–
3D TSE with Variable Flip Angle	SPACE	CUBE
Number of Echoes	Turbo Factor	Echo Train Length (ETL)
Time Between Echoes	Echo Spacing	Echo Spacing
Echo Planar Imaging (EPI)	EPI	EPI
Number of Echoes	EPI Factor	ETL
Diffusion-Weighted Imaging	DWI	DWI
Apparent Diffusion Coefficient Map	ADC	ADC
Diffusion Tensor Imaging	DTI	Diffusion Tensor Imaging
DTI Tractography (Fiber Tracking)	DTI Tractography	FiberTrak
Turbo Gradient Spin Echo (GRASE)	TurboGSE, TGSE	–
Motion Correction		
1D Navigators for Cardiac Imaging	1D PACE	Navigators
2D Navigators for Abdominal Imaging	2D PACE	–
3D Prospective Motion Correction for fMRI	3D PACE	–
3D Retrospective Motion Correction for fMRI	3D ART	
Motion Correction with Radial Blades	BLADE	PROPELLER
Soft Tissue Motion Correction	BRACE	

Philips	Hitachi	Toshiba
SE	SE	SE
Fast Field Echo (FFE)	GE	Field Echo
T1-FFE	RF Spoiled SARGE, RSSG	FastFE
FFE	Rephased SARGE	SSFP
T2-FFE	Time-Reversed SARGE	
Balanced FFE	Balanced SARGE, BASG	True SSFP
–	Phase Balanced SARGE, PBSG	–
–	–	–
M-FFE	–	–
TFE	RGE	Fast FE
3D TFE	MPRAGE	3D Fast FE
THRIVE	TIGRE	
DWIBS		Body Vision
(Venous BOLD)	–	
Keyhole (4D-TRAK)	–	
BLISS		RADIANCE
TRANCE	VASC FSE	FBI, CIA
B-TRANCE	VASC ASL	Time-SLIP
–	–	
IR-TSE	IR	IR
STIR	STIR	FastSTIR
FLAIR	FLAIR	FastFLAIR
Real IR	–	FastIR
TSE (Turbo Spin Echo)	FSE (Fast Spin Echo)	FSE (Fast Spin Echo)
Single-Shot TSE	Single-Shot FSE	FASE
DRIVE	Driven Equilibrium FSE	T2 Puls FSE
–	–	–
VISTA	–	–
Turbo Factor	Shot Factor	Echo Train Length (ETL)
Echo Spacing	Interecho Time (ITE)	Echo Spacing
EPI	EPI	EPI
EPI Factor	Shot Factor	Echo Train Length (ETL)
DWI	DWI	DWI
ADC	ADC Map	ADC
Diffusion Tensor Imaging	–	DTI
FiberTrak	–	–
GRASE	–	Hybrid EPI
Navigators	–	–
–	–	–
–	–	–
MultiVane	RADAR	JET

Vendor MRI Acronyms

	Siemens	GE
Parallel Acquisition Techniques	iPAT	
PAT: Image-based Algorithm	mSENSE	ASSET
PAT: k-space-based Algorithm	GRAPPA	ARC
Integrated Calibration	Auto-Calibration	Self-Calibration (with ARC)
Separate Calibration	Turbo-Calibration	(Calibration for ASSET)
Multiple datasets calibrate each other	Self-Calibration, T-PAT	–
Spectroscopy		
Prostate Spectroscopy	3D CSI	PROSE
Breast Spectroscopy	GRACE	BREASE
Comprehensive Cardiac Tool	BEAT (2D/3D)	–
Patient Orientation Sequence	Localizer, Scout	Localizer
Contrast Bolus Timing/Visualization	CARE Bolus	Smart Prep; FluoroTriggered MRA
Sequence Parameters		
Repetition Time, Echo Time (in msec)		TR, TE
Inversion Time (in msec)	TI	TI
Averages	Average	NEX
Simultaneous Excitation	Simultaneous Excitation	POMP (Phase Offset Multiplanar)
RF Pulse in Gradient Echo	Flip Angle	Flip Angle
Scan Measurement Time	Acquisition Time, TA	Acquisition Time
Distance Between Slices	Distance Factor (% of slice thickness)	Gap
Shifting Slices Off Center	Off-center Shift	Off-center FoV
Field of View (FoV)	FoV [mm]	FoV [cm]
Rectangular FoV	FoV Phase/Rectangular FoV	Partial FoV (PFoV)
Bandwidth	Bandwidth [Hz/Px]	Receive Bandwidth [kHz]
Variable Bandwidth	Optimized bandwidth	Variable Bandwidth
Frequency Oversampling	Oversampling	Anti-Aliasing
Phase Oversampling	Phase Oversampling	No Phase Wrap
Segmented k-Space	Lines/Segments	Views per segment
Time Delay/Block k-space	Time Delay	Intersegment Delay
Half Fourier Imaging	Half Fourier	1/2 NEX; fractional NEX
Partial Echo	Asymmetric Echo	Partial Echo
Gradient Moment Nulling	GMR/Flow Comp	Flow Comp
Ramped RF Pulse	TONE	Ramped Pulse
Magnetization Transfer Contrast	MTC; MTS	MTC
Prep Pulse – Chemically	Fat Sat	Fat Sat/Chem Sat
Water Excitation	Water Excitation	–
Fat-Water separation	DIXON	IDEAL
Prep Pulse - Spatially	Presat	SAT
Moving Sat Pulse	Travel Sat; Tracking Sat	Walking Sat
Scan Synchronization with ECG	ECG Triggered	Cardiac Gated/Triggering
Delay after R-Wave	Trigger Delay; TD	Trigger Delay; TD
Respiratory Gating	Respiratory Gated	Respiratory Comp
Multi-Channel RF Coil Sensitivity Normalization	Prescan Normalize	PURE
Central k-space Filling Arterial Visualization	Elliptical Scanning	Elliptic Centric

Competition product descriptions, comparison, and specifications contained in this document are based on interpretation of available data at the time this material was being prepared and may require independent verification. Specifications have been obtained from competition brochures, websites, and other independent published sources.

Philips	Hitachi	Toshiba
SENSE	RAPID	SPEEDER
–	–	–
–	–	–
(Calibration for SENSE) / CLEAR	(Calibration for RAPID)	(Calibration for SPEEDER)
–	–	–
–	–	–
–	–	–
Plan Scan	Scanogram	Locator
BolusTrak	FLUTE	Visual Prep
TR, TE	TR, TE	TR, TE
TI	TI	TI
NSA	NSA	NSA
Multi-Slice	Dual Slice	QuadScan
Flip Angle	Flip Angle	Flip Angle
Acquisition Time	Scan Time	Acquisition Time
Gap	Slice Interval	Gap
Off-center FoV	Off-center FoV	Phase & Frequency Shift
FoV [mm]	FoV	FoV
Rectangular FoV	Rectangular FoV	Rectangular FoV
Fat/Water Shift [pixel]	Bandwidth	Bandwidth
Optimized Bandwidth	Variable Bandwidth	Matched Bandwidth
Frequency Oversampling	Frequency Oversampling	Frequency Wrap Suppression
Fold-over Suppression	Anti-Wrap	Phase Wrap Suppression
Views/Segment		Segments
TD		TD
Half Scan	Half Scan	AFI
Partial Echo	Half Echo	Matched Bandwidth
Flow Comp; Flag	GR	FC
TONE	SSP	ISCE
MTC	MTC	SORS-STC
SPIR	Fat Sat	MSOFT
Proset	Water Excitation	PASTA
–	FatSep	
REST	Pre Sat	Pre Sat
Travel REST	Sequential Pre Sat	BFAST
ECG Triggered/VCG	ECG Triggered	Cardiac Gated
Trigger Delay; TD	Delay Time	Trigger Delay; TD
Trigger; PEAR	MAR	Respiratory Gated
CLEAR	NATURAL	–
CENTRA	PEAKS	DRKS

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this brochure are available through the Siemens sales organization worldwide. Availability and packaging may vary by country and is subject to change without prior notice. Some/All of the features and products described herein may not be available in the United States.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features which do not always have to be present in individual cases.

Siemens reserves the right to modify the design, packaging, specifications and options described herein without prior notice. Please contact your local Siemens sales representative for the most current information.

Note: Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

Local Contact Information

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway
Malvern, PA 19355-1406
USA
Phone: +1-888-826-9702
www.usa.siemens.com/healthcare

Global Business Unit

Siemens AG
Medical Solutions
Magnetic Resonance
Henkestr. 127
DE-91052 Erlangen
Germany
Phone: +49 9131 84-0
www.siemens.com/healthcare

Global Siemens Headquarters

Siemens AG
Wittelsbacherplatz 2
80333 Muenchen
Germany

Global Siemens Healthcare Headquarters

Siemens AG
Healthcare Sector
Henkestrasse 127
91052 Erlangen
Germany
Phone: +49 9131 84-0
www.siemens.com/healthcare

Legal Manufacturer

Siemens AG
Wittelsbacherplatz 2
DE-80333 Muenchen
Germany

www.siemens.com/healthcare