

## **A GLOSSARY OF AGILE/SCRUM TERMS FOR HARDWARE DESIGN**

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- 3-5-3 – Three roles, five events, three artifacts.
- Agile - the ability to respond effectively during the design process to uncertain, risky, variable, and evolving information.
- Agile Principles – Ten basic principles that guide all hardware agile methods.
- Burndown Chart – a tool used to plot progress during a sprint see Story
- Daily Standups – See Sprint Standup.
- Design Cycle – The “Do” portion of a sprint where design progress is made.
- Done – The Product Owner judges that the product increment completes the story/requirement.
- Epic – A super-story with stories as children.
- Estimation – creating a best guess for how long it will take to complete a task, either in terms of hours or Story Points.
- Goal - The product needs in terms of the voice of the customer and captured through stories and requirements.
- Hardware – Any artifact being designed that is not software, including mechanical, electronic and mechatronic systems.
- Product Backlog – an area on the Scrum Board where stories and tasks are parked waiting to be addressed in a sprint.
- Product Backlog Grooming – a meeting where the product backlog is refined.
- Product Owner (PO) – The voice of the customer on the team.
- Ranking – reordering stories/requirements or tasks based on dependency, certainty, importance or lead time.
- Requirement – a design goal from planning (e.g. QFD) or story.
- Scrum - an agile method initially developed for software design.
- Scrum at Scale – Scrum hierarchy, scrum of scrums.
- Scrum Board – a tool used to manage a sprint that can be physical, on the wall, or virtual, online.
- Scrum Master (SM) – a team member who drives the process and is accountable for removing impediments, so the team can efficiently complete the design cycle.
- Spiral Process – an iterative design process well supported by a series of sprints.

- Sprint – A Timeboxed Design Cycle.
- Sprint Burndown Chart – A tool for tracking progress during a sprint.
- Sprint Backlog – A list of the tasks and stories to be addressed during the current sprint.
- Sprint Planning Meeting – Plan the tasks and stories to be resolved during the sprint.
- Sprint Retrospective – A meeting at the end of a sprint to review and improve the process for future sprints.
- Sprint Review – A design review at the end of a sprint.
- Sprint Standup – Daily sprint meeting to review what was done yesterday, what will be done today and identify problems.
- Standup - See Sprint Standup.
- Story – A method to represent design goals used in software engineering and helpful here
- Story Points – a method to estimate how many tasks can be undertaken during a sprint as an alternative to estimating time. It is widely used and many feel it is better than estimating time, but others favor time estimates.
- Swarming – The ability of a team to reallocate resources during a sprint to resolve difficult issues.
  
- Task – The activities that need to be done during a sprint to complete stories.
- Team – The Technical Team, Product Owner and Scrum Master who execute a Sprint.
- Technical Team – The people who do the technical work during a Sprint.
- Test Driven Development (TDD) – The concept that every task should have measurable targets that can be tested to prove they have been completed.
- Timeboxed – A predefined length of time for a Sprint or a meeting.
  
- Velocity – the sum of the tasks completed during a sprint. Items started but not finished do not contribute to the sprint's velocity.
  
- Waterfall – A sequential design process common in industry.
- WIP – “work in Process” – work that is not done at the end of a sprint may as well not been started.
  
- Yesterday's weather – A scrum term for using the results of past task completions to estimate the time necessary for future tasks.