Search String Evolution Rapid Review RunSoC
Status as of 25.02.2025

Index	Data Source	Changes	Search String	Affect of Update	Number of Results
1	Scopus	First version based on PICOC criteria	TITLE-ABS-KEY ("software component*" AND "HPC" AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*") AND ("mapping" OR "allocation" OR "systematic distribution") AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization"))	Original	0
2	Scopus	Removal of 'HPC' to not restrict findings to HPCs only	TITLE-ABS-KEY ("software component*" AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*") AND ("mapping" OR "allocation" OR "systematic distribution") AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization"))	No Affect	1
3	Scopus	Consideration of also 'microprocessor OR microcontroller'	TITLE-ABS-KEY ("software component*" AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*" OR microprocessor OR microcontroller) AND ("mapping" OR "allocation" OR "systematic distribution") AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization"))	No Affect	1
4	Scopus	Change of '"software component*"' to '(software OR "software*component*")'	TITLE-ABS-KEY ((software OR "software*component*") AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*" OR microprocessor OR microcontroller) AND ("mapping" OR "allocation" OR "systematic distribution") AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization"))	Big Affect	37
5	Scopus	Adding 'OR method*'	TITLE-ABS-KEY((software OR "software*component*") AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*" OR microprocessor OR microcontroller) AND ("mapping" OR "allocation" OR "systematic distribution" OR method*) AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization"))	Huge Affect	205
6	Scopus	Removal of 'software*component*'	TITLE-ABS-KEY (software AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*" OR microprocessor OR microcontroller) AND ("mapping" OR "allocation" OR "systematic distribution" OR method*) AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization"))	No Affect	205

7	Scopus	Adding again 'hpc OR "High*Performance Comput*"' as our focus	TITLE-ABS-KEY (software AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*" OR microprocessor OR microcontroller) AND ("mapping" OR "allocation" OR "systematic distribution" OR method*) AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization" OR hpc OR "High*Performance Comput*"))	No Affect	207
8	Scopus	Filtering out battery/batteries 'AND NOT batter*' as not research related	TITLE-ABS-KEY (software AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*" OR microprocessor OR microcontroller) AND ("mapping" OR "allocation" OR "systematic distribution" OR method*) AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization" OR hpc OR "High*Performance Comput*") AND NOT	Big Affect	177
9	Scopus	Adding 'OR heterogeneous' to not restrict findings to homogeneous multi-core SoCs	TITLE-ABS-KEY (software AND (vehicle OR automotive) AND ("System-on-Chip" OR "SoC" OR "semiconductor design partition*" OR microprocessor OR microcontroller) AND ("mapping" OR "allocation" OR "systematic distribution" OR method*) AND ("mixed critical*" OR "functional domain*" OR "real-time*" OR "safety-critical" OR "performance optimization" OR hpc OR "High*Performance Comput*" OR	Big Affect	192