

# Standard Cell Libraries

## GF 55nm

SILVACO

### Overview

Silvaco's Standard Cell libraries deliver thousands of highly optimized cells with each one being optimized for power, area, speed, routing, and yield. These libraries may be extended with Power Management Kits, taking power reduction to the next level, and ECO Kits to enable late-stage design modifications.

In addition to a rich set of base standard cells each Silvaco standard cell library offers thousands of cell variants, enabling applications such as low power, minimal area, or high speed. Each cell family in a library is carefully sized, optimizing transistor sizes, P/N ratios, and drive strength granularity for improved power consumption and performance gains.

Multi-bit and multi-height standard cells boost routing density even further by reducing pin count and packing more functionality inside standard cells.

### Available Libraries

Technology	Type	Description	Tracks
55BCDlite	Library	7T Base Library RVT	7
55BCDlite	Library	7T Base Library RVT (with DNW)	7
55BCDlite	Library	7T Base Library HVT (with DNW)	7
55BCDlite	Library	7T Base Library LVT (with DNW)	7
55BCDlite	Library	7T Base Library SHVT	7
55BCDlite	Library	7T Base Library SLVT (with DNW)	7
55BCDlite	Library	7T Base Library SHVT (with DNW)	7
55BCDlite	Library	7T Base Library SLVT	7
55BCDlite	Library	7T Base Library LVT	7
55BCDlite	Library	7T Base Library HVT	7
55BCDlite	Library	10T SESAME BIV Standard Cell library	10
55BCDlite	PMK	7T Power Management Kit RVT	7
55BCDlite	PMK	7T Power Management Kit RVT (with DNW)	7
55BCDlite	PMK	7T Power Management Kit HVT (with DNW)	7
55BCDlite	PMK	7T Power Management Kit LVT (with DNW)	7
55BCDlite	PMK	7T Power Management Kit SLVT (with DNW)	7
55BCDlite	PMK	7T Power Management Kit SLVT	7
55BCDlite	PMK	7T Power Management Kit SHVT (with DNW)	7
55BCDlite	PMK	7T Power Management Kit SHVT	7
55BCDlite	PMK	7T Power Management Kit LVT	7
55BCDlite	PMK	7T Power Management Kit HVT	7
55BCDlite	HPK	9T MBFF Kit SLVT (with DNW)	9
55BCDlite	HPK	9T MBFF Kit SLVT	9
55BCDlite	HPK	9T MBFF Kit SHVT	9
55BCDlite	HPK	9T MBFF Kit SHVT (with DNW)	9
55BCDlite	HPK	9T MBFF Kit LVT (with DNW)	9
55BCDlite	HPK	9T MBFF Kit HVT	9

Technology	Type	Description	Tracks
55BCDlite	HPK	9T MBFF Kit RVT	9
55BCDlite	HPK	9T MBFF Kit LVT	9
55BCDlite	HPK	9T MBFF Kit RVT (with DNW)	9
55BCDlite	HPK	9T MBFF Kit HVT (with DNW)	9
55BCDlite	HPK	8T MBFF Kit SLVT (with DNW)	8
55BCDlite	HPK	8T MBFF Kit SHVT (with DNW)	8
55BCDlite	HPK	8T MBFF Kit SHVT	8
55BCDlite	HPK	8T MBFF Kit SLVT	8
55BCDlite	HPK	8T MBFF Kit HVT	8
55BCDlite	HPK	8T MBFF Kit LVT	8
55BCDlite	HPK	8T MBFF Kit LVT (with DNW)	8
55BCDlite	HPK	8T MBFF Kit RVT (with DNW)	8
55BCDlite	HPK	8T MBFF Kit RVT	8
55BCDlite	HPK	8T MBFF Kit HVT (with DNW)	8
55BCDlite	ECO	7T Engineering Change Order Kit RVT (with DNW)	7
55BCDlite	ECO	7T Engineering Change Order Kit SLVT (with DNW)	7
55BCDlite	ECO	7T Engineering Change Order Kit SHVT (with DNW)	7
55BCDlite	ECO	7T Engineering Change Order Kit SLVT	7
55BCDlite	ECO	7T Engineering Change Order Kit SHVT	7
55BCDlite	ECO	7T Engineering Change Order Kit HVT	7
55BCDlite	ECO	7T Engineering Change Order Kit RVT	7
55BCDlite	ECO	7T Engineering Change Order Kit LVT (with DNW)	7
55BCDlite	ECO	7T Engineering Change Order Kit HVT (with DNW)	7
55BCDlite	ECO	7T Engineering Change Order Kit LVT	7
55LPX	Library	7T Base Library RVT	7
55LPX	Library	7T Base Library RVT (with DNW)	7
55LPX	Library	7T Base Library HVT (with DNW)	7
55LPX	Library	7T Base Library LVT (with DNW)	7
55LPX	Library	7T Base Library SHVT	7
55LPX	Library	7T Base Library SLVT (with DNW)	7
55LPX	Library	7T Base Library SHVT (with DNW)	7
55LPX	Library	7T Base Library SLVT	7
55LPX	Library	7T Base Library LVT	7
55LPX	Library	7T Base Library HVT	7
55LPX	Library	10T SESAME BIV Standard Cell library	10
55LPX	PMK	7T Power Management Kit RVT	7
55LPX	PMK	7T Power Management Kit RVT (with DNW)	7
55LPX	PMK	7T Power Management Kit HVT (with DNW)	7
55LPX	PMK	7T Power Management Kit LVT (with DNW)	7
55LPX	PMK	7T Power Management Kit SLVT	7
55LPX	PMK	7T Power Management Kit SHVT (with DNW)	7
55LPX	PMK	7T Power Management Kit LVT	7

Technology	Type	Description	Tracks
55LPX	PMK	7T Power Management Kit SHVT	7
55LPX	PMK	7T Power Management Kit HVT	7
55LPX	PMK	7T Power Management Kit SLVT (with DNW)	7
55LPX	HPK	9T MBFF Kit LVT (with DNW)	9
55LPX	HPK	9T MBFF Kit HVT	9
55LPX	HPK	9T MBFF Kit SHVT (with DNW)	9
55LPX	HPK	9T MBFF Kit SHVT	9
55LPX	HPK	9T MBFF Kit SLVT	9
55LPX	HPK	9T MBFF Kit RVT	9
55LPX	HPK	9T MBFF Kit LVT	9
55LPX	HPK	9T MBFF Kit SLVT (with DNW)	9
55LPX	HPK	9T MBFF Kit RVT (with DNW)	9
55LPX	HPK	9T MBFF Kit HVT (with DNW)	9
55LPX	HPK	8T MBFF Kit SHVT (with DNW)	8
55LPX	HPK	8T MBFF Kit SHVT	8
55LPX	HPK	8T MBFF Kit SLVT	8
55LPX	HPK	8T MBFF Kit HVT	8
55LPX	HPK	8T MBFF Kit LVT	8
55LPX	HPK	8T MBFF Kit LVT (with DNW)	8
55LPX	HPK	8T MBFF Kit RVT (with DNW)	8
55LPX	HPK	8T MBFF Kit RVT	8
55LPX	HPK	8T MBFF Kit HVT (with DNW)	8
55LPX	HPK	8T MBFF Kit SLVT (with DNW)	8
55LPX	ECO	7T Engineering Change Order Kit RVT (with DNW)	7
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55LPX	ECO	7T Engineering Change Order Kit SHVT	7
55LPX	ECO	7T Engineering Change Order Kit HVT	7

## Deliverables

- Verilog gate-level
- Liberty Files (timing and power)
- Place and Route
- ATPG
- GDSII
- Layer Map
- LVS Netlist
- Datasheet

Performance, area, and power specifications are available upon request.