PLASTIC INJECTION MOLDING

## DFM CHECKLIST

TITLE DATE

	ITEMS	CONSIDERATIONS
PART	Part Name	Confirm accuracy and completeness
	Part Number	Confirm accuracy and completeness
	Part Image (Isometric/3D)	Good for ease of reference
	Part Dimensions	Overall dimensions (LWH)
	Material Type	Plastic family
	Material Grade	Specific grade identified?
	Drawing Number	Confirm accuracy
	Drawing Revision	Important that the current version is being used
	Mass/Weight	Confirm accuracy
	Plastic Shrinkage	Shrinkage percentage is very important
MOLD	Tool Type	Two-plate, three-plate, family, other?
	Mold Frame Material	Type of steel
	Runner Type	Cold or hot?
	Side Actions	Any slides, lifters or other items needed?
	Number of Cavities	Multiple cavities should have cavity IDs
	Cavity & Core Material	Type and hardness of steel (or other metal)
	Surface Finish (Cavity)	Preferably an SPI standard
	Surface Finish (Core)	Preferably an SPI standard
	Slide or Pin Steel	Type and hardness of steel
	Mold Dimensions	Overall dimensions (LWH)
PARTING LINE	Hot Side	Identified
	Cold Side	Identified
	Parting Line Location	Shown on the part
GATE & RUNNER	Gate Type	Sub gate, edge gate, other?
	Gate Size	Dimensions of gate
	Gate Location	Shown on the part
	Runner Size	Dimensions of runner
EJECTION	Ejection Method(s)	Pins, sleeves, other?
	Ejector Pin Sizes	Pin diameters
	Ejector Pin Locations	Shown on the part
	Internal Threads on Part?	Rotating cores, collapsible cores, other?
DRAFT ANALYSIS	Surface Draft Angle Findings	Are the draft angles adequate for ejection?
	Recommendations	Any suggested changes for proper ejection?
	Mold Open & Close Direction	Indication of how the mold opens and closes
	Scale/Measurement	What are the draft angles?
POSSIBLE ISSUES	Wall Thickness Okay?	Not too thick, not too thin, uniform?
	Sink Marks?	Any possible sink mark locations?
	Radius Needed?	Any problematic sharp edges or corners?
	Bosses Okay or Needed?	Are the bosses acceptable or needed?
	Ribs Okay or Needed?	Rib thickness to nominal wall ratio okay?
	Undercuts?	To be eliminated, or how accommodated?
	Suggested Design Changes?	Any other issues or opportunities to optimize?
MISCELLANEOUS	Mold Engraving & Identification	Put part and ownership info on mold
	Inserts?	Interchangeable or other inserts?
	Tool Layout	Overall structure
	Other	Overmolding? Insert molding? Cycle counter?

Completed By:

