

This is the language specification for a specific syntax of system F (augmented with additional constructs) used by this compiler

l	$:=$	null	unit literal
		true false	boolean literals
		\dots $\sim\mathbf{2}$ $\sim\mathbf{1}$ $\mathbf{0}$ $\mathbf{1}$ $\mathbf{2}$ \dots	64 bit signed integers
e	$:=$	l	literals
		id	identifier
		(e)	parenthesized
		$e_1 e_2$	application
		$e_1 \text{ op } e_2$	infix operation
		$e [\langle\tau\rangle^{(\cdot)}]$	type application
		forall $\langle id \rangle^{(\cdot)}. e$	parametric polymorphism
		if e_1 then e_2 else e_3	if expression
		lambda $\langle id : \tau \rangle^{(\cdot)}. e$	anonymous function
		let $vid : \tau = e_1$ in e_2 end	
d	$:=$	val $vid : typ = exp$	value bind
τ	$:=$	tid	type identifier
		(τ)	parenthesized
		$\langle\tau\rangle^{(*)}$	tuple types
		$\tau_1 \rightarrow \tau_2$	arrow types
		univ $tid. \tau$	universal types
		int bool unit	primitive types

Supported built-in types: **int**, **bool**, **unit**.

Not supporting declaration of operators as infix.

No identifiers can be rebound.

fn arguments must be surrounded by parentheses, and must be a (potentially empty) comma-separated list of value identifiers. In particular, there are only single-argument functions.

fn arguments need to be type annotated.

Type identifiers that start with '**a**', such as '**a**', are polymorphic. Type identifiers that start with '**e**' are equality types.